

THE VALLEY FARMER.

Devoted to the Interests of the Cultivators of the Soil in the Mississippi Valley.

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THE VALLEY FARMER

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Spring Wheat.

Extract from a letter to the Editor of the Valley Farmer, dated Calloway Co. Mo., Jan. 28, 1850:

Dear Sir:—I have just received the Jan. number of the 2d Vol. of the Valley Farmer, and am much delighted with its present form and improvement.

I shall endeavor to get you subscribers enough at least for a large club, for I am confident if your work could be seen and read by the farmers in this section, they would be induced to subscribe for it. I am very anxious and solicitous for it to be read by my brother farmers in this county, for it is an interesting and valuable work, and well suited for this particular section.

Could you spare the time to drop me a few lines and give me some information as to spring wheat; will it be a good and profitable crop to raise in this section; time of sowing; and can it be bought in St. Louis; the price, &c.

We have made some enquiries in regard to Spring Wheat, but cannot find that there is any on sale in this city. A few years ago the proprietors of one of the

seed stores here purchased from Boston five bushels of Red Sea wheat, red chaff (the best spring wheat sown) which weighed 68 pounds to the bushel. Considerable quantities of it was raised for a year or two in this neighborhood, some of which was sold to the millers at the same price of winter wheat—it weighed 62 lbs. to the bushel. Those who had the seed, with the usual sagacity that marks vast numbers of the Missouri farmers, eat it up or sold it, and are now entirely out, and I do not know that a quart can be obtained in the country, or any where else short of Boston, though possibly it might be had in Chicago. For those who have not sowed winter wheat it might be well to raise spring wheat, but as a general thing we are inclined to think winter wheat is the most profitable, and, all things considered, the best crop. Spring wheat should be sown just at the time when the farmer is putting in his other crops—oats, corn, flax, hemp, tobacco, &c., while for winter wheat he may take any time that he has to spare from wheat harvest to the setting in of winter (though we believe it is better to sow early;) and then again the harvest comes just about the time that the fall crops begin to require attention. On the old lands of the east it is thought spring wheat does better in some cases than winter wheat; but this is not the case here.

GERMINATION OF BUDS.—The germination of buds is greatly promoted by alkalis and sulphur. Solutions of alcohol, camphor and essential oils also produce the same effect, and also greatly promote vegetation, especially the latter. In their concentrated state they are fatal to plants. The essential acids and their salts also exercise a favorable and very perceptible influence on the germination and subsequent development of plants.

The Air Plant is a native of China. Prince Leopold is said to have one which measures three feet in length, and has some hundreds of superb scarlet flowers. It is the Epidendron, flos aeris, celebrated alike for the beauty of its flowers and the unsurpassed sweetness of its perfume. The Chinese suspend it to fixtures in their habitations, where it grows and flowers, with no other nourishment than that derived from the air. Hence its name.

Wire Fences.

We never had much faith in wire fences, and have always considered that the cost of constructing them was put altogether too low. Instead of 25 or 30 cents per rod, as has been asserted, we do not believe a wire fence that will answer any practical purpose can be built for less than \$1.00 per rod. And when built we do not think it would be found equal to a worm fence even, or that it would last any longer; to say nothing of the danger which such an invisible barrier would present of injury to such animals as in their sports or otherwise might run against it.

In a discussion in an agricultural club, composed of members of the Ohio Legislature, on this subject, Mr. Bateham, editor of the Ohio Cultivator, gave his views, on this subject which coincide very well with our own; but we do not think that he even has set the expense high enough.

Mr Bateham said he had not much faith in the utility or economy of Wire Fences. Within a year or two past, there has been published in several agricultural papers some very flattering opinions in favor of this kind of fence, with estimates of the cost, &c., but these opinions and estimates were not based on experience, and those who had put their correctness to the test had found them quite erroneous; and he believed after a little time nothing more will be said in favor of wire fences. The first and greatest difficulty with this kind of fence, arises from the expansion and contraction of the wire by the changes of temperature of the weather causing the wire to become slack in warm weather, so as to allow hogs, &c. to pass through by pressing them apart. Another objection is, the fence being invisible, or nearly so, large animals will frequently run against it, with such violence as to break the wires, or do injury to themselves. And lastly in regard to the cost, it was found that the estimates given in the Eastern papers were entirely too low; that a much larger number of posts were necessary—more strands of wire, and of larger size than given in the estimates; so that the total cost for an efficient fence would be found fully double what had been estimated. The statements alluded to had put the cost as low as 20 to 25 cents per rod—but, 40 to 50 cts was more nearly correct.

During the past year several of the agricultural papers have published a plan adopted by Col. Capron, of Maryland, of constructing the fence with springs and weights, so as to relax or tighten, according as the atmospheric changes might require, but we did not publish it because we did not believe that any western farmer would go to the expense of procuring the requisite machinery, or if he had it by him would "fool away his time" in erecting such a structure on his lands.

We have received the following letter from an intelligent correspondent in Iowa, whose inquiries, if fairly answered, will we think, put the matter in its true light. If any of our readers have tried the thing and succeeded in it we should like to hear about the way it was done.

To the Editor of the Valley Farmer.

I find on pages 107 & 146 of the Valley Farmer two articles which recommend in very high terms wire fences. One of these articles is a communication of R. H. Phelps of Windsor, Connecticut, to the Albany Cultivator. It purports to give the result of Mr. Phelps' experience and observation in relation to wire fences.—On reading these articles I was so taken with the idea of fencing my prairie lands with an iron fence at a cost of only from twenty-five to thirty cents a rod, that I forthwith hastened to town to make arrangements to procure a quantity of wire. I found on inquiry that No. 9 wire, the size specified by Mr. Phelps, can not be purchased in your city short of twelve cents per pound. I moreover learned with some surprise, that ten feet of this wire weighed something over a pound. Mr. Phelps calculates that four wires are sufficient to make a good fence. If he be correct it requires four rods or 66 feet of wire to make one rod of fence; 66 feet of wire weigh something over six and a half pounds.—Six and a half pounds of wire at twelve cents per pound cost 78 cents. Two posts, three by three, and seven feet long will cost at least ten cents. These added to the cost of wire makes 88 cents for the material to construct a fence with four wires only, the wires being nine inches apart.

But will a fence made in this way answer any practical purpose. It evidently is not intended to exclude hogs. If there are to be only four wires, and they nine inches apart, the bottom wire will be so far from the ground that sheep can pass under with ease. And will not ingenious cattle such as one found in every neighborhood soon learn how to run their heads through between the wires? If they get their heads between the wires will they not be almost certain to break them?

I did not contemplate constructing a fence with four wires. It seemed to me that six wires, or four wires and a six inch board at the top, would be indispensable to make a good fence for cattle and sheep. And judging from the theory of the thing without having had any practical experience in relation to the matter I think that ten horizontal wires at least, and a vertical wire at the distance of every four feet, will be necessary to make a good fence that will answer all the practical purposes of the farmer. Let us arrange them in their order, the bottom wire being three inches from the ground:

1st Wire, space 3 inches	6th wire, space 7 inches
2d do do 3 do	7th do do 8 do
3d do do 3 do	8th do do 9 do
4h do do 4 do	9th do do 9 do
5h do do 5 do	10th do do 9 do
60 inches	

We will construct this fence out of No. 13 wire, 33 feet of which weigh a pound. 185 feet of this wire, including three vertical pieces, are therefore necessary to make a rod of fence. This weighs five lbs. and a half, which, at 12 cents a pound, costs 66 cents. Add to this the cost of posts, say ten cents, and we have 76 cents for the cost of the material to make a rod of fence. Instead of the top wire I think I should prefer a six inch board. A good rail fence on the prairie, from four

to six miles from timber, in Iowa, costs from 50 to 60 cents per rod. Now which is the cheaper of the two will depend very much upon the durability of each.—Can any one give us light on this point? Let me also enquire whether No. 13 will be too small? What is the cost of wire of different sizes in your city? Have you, Messrs Editors, or has any body else, ever seen or heard of a wire fence that has been found from *actual experience* of a year or more, to answer all the practical purposes of the farmer, where cattle, horses, sheep, hogs &c., are running at large as on the prairies? If there is such a fence in existence myself and neighbors would be glad to see an accurate description of it, together with an estimate in detail of its cost. We find it difficult to persuade ourselves that the pigs will not spring the wires and slip through between them even though they be not more than three inches apart.—Messrs. Editors, it is hoped that you will not let the matter of wire fences rest until it shall have been thoroughly discussed.

AGRICULTOR.

Osage Orange Hedge.

To the Editor of the Valley Farmer.

I am much pleased with your paper and wish you all success in the enterprize—should like to contribute to your columns, as requested, if I had anything worth writing, but as I have not, prudence would dictate, (and you say farmers should be prudent men) that I should say—nothing,—I will venture, however, to say for you and myself, (not for the people) as we may hereafter become better acquainted, that I was raised a Virginia Farmer, somewhat after the “old regimen,”—have lived on the farm I now occupy some twenty years, but have moved along pretty much after the old jog-trot manner of farming, without much of “success” or “failure,” worth talking about,—I feel prompted, I must say perhaps by the spurs you occasionally apply, to try “to mend my ways” a little—and as a beginning I last spring commenced rearing a hedge of Osage Orange. A brief account of my success may not be wholly uninteresting to you. I purchased one thousand plants or scions, of Professor Turner, of Jacksonville, Ill. I received them about the first of May, planted them in prairie land, which I did in person, and was two days in accomplishing it. I placed the scions at ten inches apart,—plowed and hoed them twice during the season. They grew from 2 1-2 to 6 feet high, and I think would average four feet. I feel much pleased with my experiment thus far, but will not “hollow” before “I get out of the woods” and will say no more about it at present. Can you give us any information as to the proper treatment from this stage forward?—how low should they be “headed down”?—at what time?—with what sort of instruments, &c.

Yours respectfully,

WILLIAM CARSON.

Detroit, Marion Co., Mo.

Now this is just the kind of men that **CAN** write for The Valley Farmer, if they will only think so—men who can speak from experience. We find in the remarks of Mr. Bateham alluded to in the preceding arti-

cle upon wire fences, some items about the Osage Orange, and his success in cultivating it, which will no doubt be interesting to our friends who are rearing the plant.

For his own part, Mr. B. said, he was an advocate of hedges, or live fences. Perhaps this preference was owing in part to early associations; and admiration for the beautiful hawthorn hedges of England, which besides being a perfect protection to fields and gardens, form so charming feature in the landscape scenery of that country. In the State of New York, he had, in past years endeavored to promote the cultivation of hedges, both the English and American species of hawthorn; and many experiments had been made there, and in other States, with these plants, but in a majority of cases with not very good results. In the first place the growth of the plant is too slow for the taste or patience of American farmers—as it requires 8 or 10 years to form a good hedge. Then in most situations it is found that the summers of this country are too hot and dry for the hedges to flourish; and borers, or other insects, and field mice, are very destructive, causing gaps, and irretrievable injury; consequently few persons at the present time are willing to plant hawthorn hedges.

The Osage Orange, said Mr. B., is the only plant that seems perfectly adapted for making live hedges in this country. In fact, it seems to possess every desirable quality for that purpose. This tree is a native of the Red River country, in Arkansas, Texas, and southern Missouri, where it is called *Bois d' Arc*, (bow-wood) owing to the strength and elasticity of its wood. It is found perfectly adapted to this climate—only the tops of the young plants being killed by the winter, which is no injury to a fence. In portions of Pennsylvania and New York, it is also found to succeed well, also in Indiana and Illinois, where it is likely to prove a most valuable boon to the farmers, owing to the scarcity of timber.

These plants are of rapid growth, forming a hedge strong enough to stop ordinary cattle, in four years from the seed, with ordinary care and good land. They are armed with sharp, strong thorns, and seem inclined to grow in dense bushy form, rendering the hedge impenetrable to man, boy, or beast. The foliage is remarkably handsome, of a bright shining green; the roots penetrate very deep in the ground, enabling plants to thrive during severe drought; and the taste of the leaves is so offensive to animals that cattle will not browse it. It also seems to have the quality of adapting itself to nearly all soils and situations, from a wet clay to dry sand; and it will bear flooding with water—a quality which is highly desirable, adapting it to bottom lands where the streams occasionally overflow.

Mr. B. said he had seen beautiful and complete hedges of the Osage Orange in the vicinity of Philadelphia, from 12 to 15 years old; also specimens near Cincinnati; and he would invite gentlemen present to examine a piece, 13 rods in length, on his own grounds in this city, on Broad street, near the ground of the Lunatic Asylum. This was of only four year's growth, (3 years planted;) and was fully exposed to the cattle

of the street for a month or two before the leaves came off, the past fall; and now has only a narrow board at the top, which will be removed in the Spring, as soon as the hedge is in leaf, after which time it will serve as a protection to his fruit garden. The soil is a stiff yellow clay—formerly a brick-yard—and in another part of the lot, several rods of a hedge, three years old was submerged in water several weeks during the past summer, without injury; and it is also under water most of the time this winter. The only objection against this kind of a hedge appears to be its strong growth, and the consequent need of several trimmings. This was all found to be less requisite when the hedge becomes 10 or 12 years old, as its growth is then slower; but for the first eight or ten years, at least, one severe clipping each year, must be given, or its growth will be too high and wide, without being sufficiently dense; consequently indolent farmers, or those who are unwilling to take some pains to make a beautiful and everlasting fence, should not plant the Osage Orange for this purpose. The labor of trimming, however, will be found a small matter, after we learn how to do it, and obtain the right tools.

The cost of this kind of hedge, cannot be exactly stated. The present price of plants is \$5.00 per thousand but they can be raised for half that price, with good seed and requisite skill. About thirty plants should be set to the rod; thus if we call the plants 10 cts. per rod, the preparation of the ground and planting may be ten cts. more; then five cts. per rod, the cost of hedge 2 years old seed.

[We cannot speak with certainty as to the best mode of treatment after the second year. The directions given by eastern cultivators do not answer at all in our soil and climate. We learn from Mr. Turner that he will shortly issue a circular to those who have purchased plants of him, giving the results of his experience and observation, and recommending what he considers the best manner of treating the hedge the second year after setting. We learn also from Mr. T. that he is preparing a treatise upon the subject of hedging and the history and culture of the Osage Orange. Such a work will be invaluable to cultivators, and will, we doubt not, meet with a rapid sale.

We have seen two methods adopted the second season, but cannot say which is the best, or whether some other is not better than either. One is to cut off the stock six inches above the top of the ground, the other to bend over the top of the plant and lock it in to those next to it. This method forms quite a barrier the second year.

There is, the present spring, quite a scarcity in the market, not only of seed but of plants for setting. Very much of the seed sown last season, never came up, and vast quantities of plants were killed by the frost. As a consequence, plants have gone up to \$15 per thousand in Ohio, and are very scarce at that.

Buyers cannot be too cautious in purchasing seed, as there is a great deal of boiled and fermented seed in market, which will never come up if planted.

CULTURE OF MADDER IN OHIO.—In the Patent office report for 1847, is an article from our pen, on the culture of madder in Ohio. The article is contained in the *Ohio Cultivator* of August 1st, 1848; and we then stated that ourselves and Mr. Eaton of this city had commenced the business of growing madder, with good promise of success, and we intended to increase our plantation the following spring.

We have recently received several letters asking for information in regard to our success; also relative to the operations of Mr. Swift, of Erie county, who we had stated was engaged in this business.

Our own operations (in connection with Mr. Eaton,) have not been successful; but the difficulty was simply in the kind of soil. We found the bottom lands in this vicinity too *clayey and wet* for this crop. Our plantation was once or twice overflowed, and nearly destroyed. Not finding suitable land near enough to town for our purpose, we last spring dug up all the roots and sold them to go to Texas for planting. We are still convinced that with suitable soil, the crop will thrive perfectly well in this climate.

Mr. Swift informs us, that owing to the difficulty in his vicinity of procuring a sufficient number of extra hands at times when required, and his own advanced age, he has nearly given up the madder business; at the same time he has undiminished confidence in its success and profitableness.

NEW AND IMPORTANT.—By a letter from an extensive manufacturer in New England, we learn that the use of madder in this country has greatly increased of late, and its price is likely to be high for some years to come. He also states that the manufacturers are anxious to encourage the production of madder in this country; and that the difficulty which has heretofore existed in the matter of grinding the roots need not be encountered, as they prefer to buy the roots without being ground, and grind them themselves.—*Ohio Cultivator*.

THE GREAT COW CASE.—The Case of James A. Maynard vs. Cummings Litchfield, is another exemplification of the results of appealing to the law. In this the plaintiff alleged that the defendant, to whom he entrusted a cow worth \$100 or more, had by negligence, improper food, or some other cause, allowed her to die. Of course, in such a case all the cow knowledge of the commonwealth was in requisition, and the matter so mystified that two or three juries were totally unable to agree upon a verdict. At last a jury had been found who after considering and sleeping on the matter for twenty six hours, agreed to give the plaintiff one dollar damages, each party paying his own costs, which it is said will amount to \$1000 or more.—*Boston Traveler*.

PLANK 'EM.—The *Savannah Republican*, in an article relative to Plank Roads, says:

We counted yesterday the load of one of our draymen, who had a team of three horses; and found there were forty sacks of salt. The load for two horses, before the plank road was built, was six; the team, therefore, was drawing four and a half times the amount they could have hauled on a sandy road, and apparently with more ease."

PROCEEDINGS OF THE NORTH AMERICAN POMOLOGICAL CONVENTION HELD AT SYRACUSE, SEPT. 14, 1849.—We have received from Dr. J. A. Kennicott the President of this Convention, a corrected copy of this report, for which he will please accept our thanks.—Interesting reports were made to this Convention from Illinois, New York, Ohio, Michigan, Wisconsin, Vermont, and a profitable discussion took place on the best kinds of fruits—and the relative value of the different kinds. We extract from Dr. Kennicott's report, as Chairman of the Illinois committee the following remarks:

It is nearly 200 years since the first settlement of this State, [Illinois] by the French, at Kaskaskia and Cahokia; yet I have no certain evidence that there is a fruit tree of a cultivated variety, 40 years old in Illinois,—and I am well assured that there are but very few of even half that age.

There were a few squatters in northern Illinois—possibly a dozen or more families—at the time of the Black Hawk war in 1832. But as the Indian title was not extinguished until the spring of '35, no permanent settlement was commenced until the summer and autumn of that year, so that in reality the country is but from 14 to 15 years old, counting from the date of the first considerable immigration. When I first visited this region, only fifteen years ago, there were not ten families where there are ten thousand now; and I did not see a fruit tree, or even so much as a currant bush, this side of the present capital of the State, though I was told that there were some seedling trees near Peoria; and afterwards I saw apple trees near the garrison ground, Chicago, planted by General Beaupre, while Chicago was our remote trading post; and there were also a few trees set by Doctor Harmon, probably about 1833 or '34,—but except some worthless Morello cherries, these have all disappeared.

The first occupants here were mostly of the true squatter breed—genuine frontier's men—that, like “the white man's fly,” the honey bee, always precede the actual settler,—so that no attention was paid to orcharding; and in truth few of us cared much about planting trees, until we could be tolerably certain that we were planting upon our own lands; and of this, we had no evidence until after the surveys,—and no security, until after the land sales. The last of these events occurred only about 8 years ago; and the former, the year before. From this era, we date the commencement of fruit culture in northern Illinois, though for some years thereafter we were all poor, having been drained by our land purchases, and more especially by the 50-100% “cent per cent,” per annum, which we had to pay those who kindly loaned us a good share of the money.

Now, let us see what has been done, in these nine years, at most. I am a son of New York, and love my native state; and yet I declare without fear of contradiction, that we, in northern Illinois, have done more to create good orchards in the last nine years than you had done “west of Cayuga Bridge,” up to the date of our commencement. Go where you will over these broad prairies, which fifteen years ago were the homes of the “Red Men,” and were tenanted only (except along the streams) by the wolf and the badger, the prairie chicken and sand hill crane, and you will find orchards and gardens, not equal, of course, to yours now, but better than the majority of yours nine years ago; not larger, for you have many orchards of large seedling trees—or had then; I see you are working the tops of some of them now, and for this you deserve much credit. But we are doing better still. We are planting the best known sorts, and we are planting them liberally, and they will liberally,—aye, abundantly, repay the care and expense. The best evidence of

what an insular region may be doing in the way of planting orchards, with the certainty of ample profits, should be sought in the number and extent of her Nurseries, and the amount of trees imported from abroad; but of this in its place.

We have here some seedling orchards from 10 to 15 years old; further south they are more numerous as well as older. It is generally remarked—and with truth—that our seedlings are better than the same class in the eastern states. Soil and climate have doubtless much, if not most, to do with this fact; still I am led to believe, despite the Van Mon's theory, that the selection of seeds may have had its influence. We reason from analogy, and are apt to believe that like should produce like. We know that the rule does not hold good with regard to fruits; still we follow it,—at least here, and we have seen some astonishingly favorable results. I will state an instance: My brother, H. Kennicott, purchased a part of his farm from a man who had a peach orchard on it, from the pits of “Hoosier Peaches,” to-wit: Small, worthless, late varieties, principally clingstones. These trees have borne 5 or 6 years, and have withstood the last hard winter. I have annually seen and tasted the fruit, for they produce abundantly,—and they are actually worthless, except for the seeds. Illinois hogs would not eat them, and they are all alike, and like their originals. Now for the reverse: Another neighbor while east, some ten years ago, ate a few good early peaches, probably Barnard's early. He planted the seeds—about a dozen,—they grew, and have borne 6 or 7 years—two of the crops very large—and sold readily at \$3.50 to \$4 per bushel. Of these, I have eaten annually; they are large, and all good and early, and all alike,—and as the others, like their progenitor, as nearly as the person can recollect. These, of course, are extreme cases,—still, I think they will find their parallels in all parts of the state; and I have certainly tasted ten passing good seedling apples here, where I have one in New York; and from my position I have the tasting of many.

There is a few miles from The Grove, quite an orchard of seedling pears, 14 years from seed, planted here. All are bearing, and what is curious, are bearing abundantly this year; the only ones I have seen.—These trees came into bearing from the 9th to the 12th year, and the fruit is said to be good, though I do not remember having eaten of it.

The most of trees planted in Northern Illinois, until within the last five or six years, were either home grown seedlings, or “Hoosier Trees,” generally from the region of the Wabash, though some came from Southern Illinois. These are often seedlings or sprouts, though sold “under name” by the tree pedlers. These trees have made a famous growth, but they show very little fruit; and when evidently worked, are too often found no better than our own seedlings. Indeed, my neighbor, Mr. Talcott, has quite a number of size to produce 16 or 20 bushels of fruit each, and I do not believe that they have borne one-bushel each, all counted, since they were planted 14 years ago; and what is somewhat characteristic of “Hoosier Trees”—or pedler's trees—they are all of the same worthless, if not nameless, variety. But for their lack of fruitfulness, I cannot account—it being a general complaint urged against southern trees in Northern Illinois. I have thought that this might be owing to the fact that most of these early trees, were worked on sprouts, or small portions of the root, of large seedlings; but it is more likely that the change of climate is the cause of this unfruitfulness, joined to their astonishingly rapid and uninterrupted growth. Most trees brought from the north and east, have come early into bearing, and have not made wood with great rapidity.

The phrase, “Hold your tongue,” is of Bible origin. Wonder how many of our readers can point to the chapter and verse.

Horses vs. Mules.

BY J. N. MONROE HARDING.

To the Editor of the Valley Farmer:—

The *mule mania* so general among western farmers, will become, we predict, very deteriorating to the *purses* of our graziers; and unless they call back the almost discarded *horse* to their pastures, the result will be a rapid tendency to *vacuity* in those comfortable appendages—the *pockets*. Now, we will talk a little about this matter, and give a few reasons for predictions so at variance with the public mind.

For a *good horse* there is always, and in every section of the Union, a good and sure market; for he is always in demand, at home and abroad; he is the pride of the warrior, the *beau ideal* of the buggy man; the greatly hoped-for of the livery man; and the angels of this terrene creation, the *Ladies*, do not hesitate to say “our riding *horse*”—but never did we hear them ask for “our riding *mule*!” and we advise them never to exchange the one for the other. But is the *mule* adapted to general use equally with the *horse*? Is he an indispensable, a *sine qua non*, from the *Broadway* “agony,” to the “*Slick*” with “notions,” or to the *parson en route* itinerant? Indeed not. Some *golden fleece* dream in California—some *annexation war*—some *casualty* must exist before he is generally and eagerly sought after. Is not such the cause of the *mule*’s present value, which is far above par? And who believes, or even hopes that such causes will always exist?

But we will show the relative *standing* value of the *horse* and *mule*, by an enquiry into the domestic uses of each.

As a *farm nag*, the *horse* is evidently preferable in the general way; for the majority of farmers may be reckoned *small farmers*—operating in a limited way, and laboring rather with a view of earning an honest and comfortable livelihood, than with the hope of becoming rich—and their humble ambition is laudable. They raise the *horse* only for their own domestic wants, and these animals they wish to do a great variety of labor, from the plow or cart to carrying their wives and children to church on Sundays and holidays. Now look along the tenor of domestic life in the country, and define a “*family nag*;” consider the character and disposition, and docility, and capacity of both *horse* and *mule*, and then answer the question, “Which is preferable?” We say, “Saddle our *horse*, Zekey! quick, or I’ll walk!”

But there are many “big bugs” among our farmers, (and we are glad of it,) who raise for the market; and in the West we find them all afflicted with the *mule mania*—in plain language, all discarding the *horse* in favor of the *mule*. Here, then, we spring the question—Is this their best policy? We think not. Can we depend on Chihuahua expeditions, Mormon emigration, and the like casualties, for a perpetual market for the article of *mules*? We hope not. A permanent market alone should be looked to by him who grazes, as his present and contemplated business. With such a market before him, he raises with a certainty.

We have, then, got this far with the case pending—

for the *horse* there is, at all times, a market in every village, and town, and city; he is preferable, as a “*family nag*;” while the *mule* market, to bring it up in *lucrativeness* to that of the *horse*, is dependent on contingencies; and during one of these contingencies, the *mule* is worth *only* as much as the *horse*—a good one, we mean.

But we have other things to state in favor of the *horse*: one is, *mules do not beget mules*, but *horses beget horses*. This is an important consideration with our *small farmers* who raise only for home use. A *horse* and a *mare* will make a good span for plowing and other work; the *mare* will produce a *colt* with but little loss of time to the farmer; that *colt* will grow and soon be able to take the place of the *horse* or its *dam*, should either fail or die. But such would not be the result, if their span consisted of two *mules*—the *dimes* would be necessary in such a contingency; ay, DOL-LARS!

Again: we opine a great change in the prices of both the *horse* and *mule* ere long, which cannot fail to be in favor of the *horse*. Our reasons are these:

Owing to the casualties before stated, the *mule* has come into rapid demand, and his value has increased nearly two fold. This circumstance has had its legitimate influence on the public mind—and *mule! mule!* resounds from *Eas’port* to the *Rio Grande*. The *horse* is hardly extant in their minds—(the people’s minds, not *Eastport’s* nor the *Rio Grande’s*.) Now this state of *muleism*, or *mule-mania*, will work its natural consequence—the market will be gorged with *mules*, while almost void of *horses*; and the sequel is very plain. The cry will be, the *horse!* the *horse!* “a kingdom for a *horse*!”

In Kentucky, and Tennessee, and Illinois, and *Missouri*, every where, do we find the pastures swarming with *mules*, while a few old “*cripples*” in *horse hides*, are dragging the plow or moping in the yards; and yet one hour’s thought ought to convince the raiser that the *mule* can never supplant the *horse*, in a permanent and perpetual call. The *mule* “can’t shine” in the *city*; the *belle monde* won’t receive him; and for all the little duties of a country “*family nag*,” he rates far below par.

Something might be advanced in the *mule*’s favor, upon the subject of longevity; but give the *horse* kind treatment, and do not abuse him while young, neither over-feed nor fast him, remember he is flesh and bone—can feel and suffer—do one’s duty to him, and I’ll go to church if he is not good for service up to twenty odd! I have known mares to bring colts at the age of twenty-nine—*horses* I have seen brisk and active at twenty-five and thirty. The *Broadbrims* of *Pennsylvania* can vouch for this.

Thus having run through this *case* hastily, we submit it to the *farmer’s* cogitations, protesting that we do not value the *mule* on account of his *long [y] ears*.

Rock Hill, St. Louis Co. Mo.

It is gratifying to us to learn, from all quarters, that our subscribers are well pleased with the improved appearance of the *Farmer*.

Cultivation of Hemp.

To the Editor of the Valley Farmer:

Most of the hemp growers in this section of country do not take the pains in preparing the soil to receive the seed as is in my mind required to secure a sure and good crop. From experience I have found that the ground destined for a hemp crop should be plowed deep and close in the fall of the year, (and if hemp was in the ground the year previous, the ground should be plowed previous to spreading, then the hemp spread on the plowed land; it will then rot quicker and more regular than if it was not plowed.) Then in the spring it may or may not be plowed again, as the farmer thinks best. My invariable rule is to watch for what is called the "spring season,"—which generally comes about the middle of April, and sometimes a few days before. It is caused by the thawing of the ground. Now this is the time to sow your seed; the ground is then moist, and continues to be longer than from a rain. One bushel and a fourth of seed per acre, at that season is plenty. Sow as regular as possible, and with narrow shovels, plows turn it under, plowing very close, and then level with a brush, and if the ground is not very wet I generally roll it with a large roller made for the purpose. As the result of this process the seed all comes up together, and grows evenly, and you have no underling hemp in your way in cutting.

If hemp seed is sown on ground that is not prepared and managed in the above way, two bushels or two and a half bushels may be put in per acre, and then not be as thick as one bushel and a fourth put on as above described; for this reason, the seed that is put in so deep as to receive the moisture of the ground will spring up in a few days; the remainder will remain until there comes a rain. The first that came up may have grown to the height of three or four inches before the others come up, and whenever that is the case the underling hemp cannot catch up, and therefore the first will be too thin and large, the last will grow up a foot or eighteen inches and wither and die. Therefore any one can see the necessity of having his ground in good order, and sown in the right season.

Hemp grows well after corn, where it has been well tended and kept clean, though the stalks should be cut low,—even with the ground,—and burned clean; and will grow still better by the roots being removed entirely. But I do not believe that it will grow as well after any thing else as it will after itself. T. B.

Holt county, Mo., Jan., 1850.

REMARKS BY THE EDITOR.—Right glad are we to receive such communications from practical men—furnishing us with the results of their own experience. The hemp crop is a very important one in the Mississippi Valley, and yet how few of our farmers are thoroughly acquainted with the proper cultivation and treatment of it! We shall be glad to publish more about it, from men who like the above writer, speak what they do know. In the mean time we remark that we think farmers generally do not plow deep enough nor plant deep

enough. We have spoken on this subject often, and shall continue to speak and write until we convince our readers that if they will be *superficial* in every thing else, they must go below the surface, when they prepare their ground for the reception of seed.

For the Valley Farmer.

Army Worm.

The march of this army, this host of worms, we mean, has been sorely felt by the western farmers the past season. The *varmints* need no description, we are too familiar with them already.

We have seen this army out-generalled—ah, there's the spice: and we are going to relate the *tactics* whereby the conflict was won.

Two gentlemen of St. Louis county, whose meadows lie contiguous to one another, suffered, like many others, the ravages of these worms, during the past summer. Their meadows were literally shorn—not quite however, a few luxuriant strips stood untouched. Now how happened this? We will tell our story, then the answer may be given by those who feel equal to the task. Well, to the story, which may be given in brief.

Sometime during last February, by an accident, a fire occurred in the meadow of one of the gentlemen in question, which spread itself into the meadow of the other, burning over certain parts of each meadow; and upon these crops grew a heavy crop of grass, untouched by the army worm.

Again: in another grass lot, belonging to one of the same men, a fire occurred about the same time, which burnt over not more than the fourth of an acre: and upon this spot, too, grew an abundant crop, untouched, while all around was laid bare by the worm. Who will account for the fact? Who can? We can vouch for the truth of the statement—after that we stick a peg, we can't go on.

QUID NUNC.

Rock Hill, St. Louis Co., Mo.

For the Valley Farmer.

Vegetable Fecundity.

The fecundity of many plants is remarkable. We somewhere in the Philo. Trans., have read an account of a single germ of barley, that produced 249 stalks, and 18,000 grains. In this trial, both art and force were used; aye, and without art, fecundity of plants would be in a bad box; and indeed she is too often there.

There were raised from one seed, as related by Mr. Edwards, of Windsor—250 pumpkins, averaging the size of a half peck measure, besides a number of immature ones.

Mr. Lacock, also of England, has published an account of 12 plants of Rhubarb. These twelve plants says he, were set in a bed of 18 square yards. In the third season were plucked, no less than five pounds every other day for five months, making a total of 300 pounds, being about 34 tons per acre! The rhubarb was sold at three pence per pound, being nearly £1,000 per acre. This estimate comprehends only the middle part of the plants.

Pliny relates upon the authority of African Gover-

ors, in their despatches to Augustus and Nero—that 4000 ears—heads with us—were yielded from one grain and that 150 ears were an ordinary yield in Egypt. Can't the Mississippi beat the Nile? Try!

We ourselves saw 131 1-8 bushels of Indian corn gathered from one measured acre, on a farm belonging to Mr. Shriver, residing in Carroll Co., Md.

To equal these yields is “devoutly to be hoped for.”

QUID NUNC.

Strawberries.

To the Editor of the Valley Farmer:—

I wish to make a few remarks on Strawberry planting, hoping some of your readers may be benefitted by it. It appears to me to be the general plan around here to plant them in patches of all sizes; now I have a great objection to this mode of culture, and if they are required in large quantities for market, so as to oblige the gardener to raise them in this way, it would be better for him to plant one fourth his ground the first year, another fourth the second, and so on until his ground is all occupied. The fifth year he should dig up these first planted, give the ground a good manuring, and replant; the second season do the same with the second patch. By pursuing this plan he will always have three-fourths of his plantation in full bearing, and producing superior fruit. Some of the strawberry growers in England plant every other year, only allowing their vines to bear once.

My next method is planting in beds. I allow four feet for a bed, planting three rows in a bed. The alleys will do two feet wide; you can walk up those alleys to clean out the weeds and gather the fruit, and even to dig in manure. The roots will derive some nourishment even from the alleys being manured, as you cannot well manure the beds. It is a very easy matter to strike a line up each side of the beds every spring and clean down; this will keep the beds their original size, and give them a neat appearance.

Another and I think a better plan is to plant them in rows about two feet apart. Let these rows grow to the width of about ten inches, then keep them this width by running your line up them every spring. It is very easy to keep them clean when planted in this way. It is necessary to put some long litter or grass between the rows in the spring, to keep your fruit clean. After the fruit is gathered, dig this grass or litter into the ground for manure, and thus it will answer two purposes. A patch of strawberries planted in rows looks very well, and as you have a better chance to manure them, there is no doubt but they will continue to yield finer fruit for a number of years than either of the other plans.

What few strawberry vines I have got are planted in beds and rows, and last season I sold thirty dollars' worth off from fifteen square yards of ground, including the alleys. Now if those vines had been in a patch they would have occu-

pied only seven and a half square yards of land. Those who saw my fruit pronounced it very fine, one berry measuring four inches in circumference. The variety I raise is Hovey's Seedling. I have given each of the three above mentioned methods of planting a fair trial, and pronounce those in rows to produce the finest fruit and that in abundance. Yours, &c.

J. TURNER.

St. Louis co., Jan. 1850.

For the Valley Farmer.

Animal and Vegetable Manures.

CONTINUED.

Green vegetable matter is an excellent manure, but less valued than it ought to be. All plants in a succulent state contain much saccharine or mucilaginous matter, and therefore cannot be used too soon after their death. It has been the practice to carry off all vegetable matter to the compost yard, and, by letting it lie in a heap, a quantity of good mould would be obtained, which is very useful where there is a green house, to pot with, and mix with other ingredients.

Sea weeds, where they can be obtained, make excellent manure for most vegetables, but particularly for sea kale, artichokes, and asparagus—the latter I give a quantity of salt every spring. This manure is transient in its effects, and does not last more than a single crop, which is accounted for by its containing a large quantity of water or its elements.

Pigeon's dung, is held in great esteem in Persia, where they manure their melons with it. It is a powerful manure, and should only be used as a compound, or, if used as a simple, the greatest care must be observed in the distribution of it. We have found it the best manure for strawberries which we have tried.

Dung of sheep affords good manure, where it can be obtained in sufficient quantity. Its chemical properties, by boiling in water, are found to afford a salubrious matter which equals from two to three per cent. of its weight.

Soot is a very powerful manure, and ought to be used in a dry state, and thrown on the surface of the ground. It is supposed to be a preventive to a certain extent of wire worms and maggots.

Bones have of late years been very extensively used as a manure. They have been found to be the best and most economical of all manures for poor sandy and peaty soils, but on stiff clay and wet soils they appear to be of little use. Bones are in general boiled, for the purpose of extracting the oil and gelatine which they contain, previous to their being used for manure, and this would lead us at first sight to suppose that this process would deprive them of much of their fertilizing properties, still it appears, however, not to be the case, and little difference has

been observed on the effects of those boiled and those not. To the horticulturist this is a subject of much interest.

Horn is a similar manure to bones, but much more powerful, as it contains a larger quantity of decomposable animal matter. The shavings of horn form an excellent manure, when they can be obtained in sufficient quantity to be in general use.

Blood contains a certain quantity of all the principles found in other animal substances, and is consequently a good manure. This might be obtained in any quantity at the slaughter houses and from the butchers. And if you will try one pail full to a grape vine, I venture to assert you will try it again. In doing this, remove a little of the earth near the root; pour in your blood, then cover it up; this will prevent any smell or unsightly appearance. Apply it early in spring.

Ashes of wood are said to be a lasting manure, if they are not too much burnt. This, however, depends on the quantity of charcoal they contain, and the benefit results from the gradual decomposition of the charcoal. For my part I think very little of them as a manure.

Sawdust, Shavings, and Tanner's Bark, are sometimes applied as manure, but as they are mere woody fibre, which is the only vegetable matter that requires fermentation to render it nutritive to plants, little benefit is to be expected from their application. Either of them, however, may be used as a corrector of strong lands, without doing them any injury, if not applied in too immoderate quantity. All animal substances are powerful manures and require no chemical preparation to fit them for the soil; the great object is to blend them with other matters so as to prevent their too rapid decomposition.

Night Soil, whether applied in a fermented state or otherwise, is a very powerful manure, and contains an abundance of food for plants. The disagreeable smell may be obviated by the addition of quick lime, or by burying as speedily as possible.

Urine of most animals affords a good liquid manure, but it is necessary to use it as soon as possible, as it is liable to undergo the putrefactive process, and urine of some animals putrifies more rapidly than that of others. It should never be applied alone; and if not mixed with solid matter, it should be diluted with water. When pure it contains too large a portion of animal matter to form a proper nourishing fluid for the absorption of plants.

J. TURNER.

St. Louis, Jan., 1860.

[To be continued.]

THE LIFE OF PLANTS.—The existence of plants depends upon certain conditions. A large number of bulbous, and the majority of the aqueous plants, live, thrive and perfect their several buds, wholly independent of the soil, deriving their entire subsistence from the two elements—air and water and their constituents.

Bartlett's Double Plow.

The sound practical judgment and eminent success with which the farming operations of Senator Webster have been carried on, at his place in Marshfield, have become proverbial, and as a consequence thereof, his opinions in relation to practical agricultural matters are entitled to great consideration. It therefore gives us pleasure to find, by the letter we copy below, that his opinion coincides with that which we have heretofore expressed in relation to an implement, the introduction of which is destined to fix an era in the progress of American Agriculture.—Mass. Spy.

Letter from Daniel Webster, on the Double Plow.

MARSHFIELD, Dec. 8, 1849.

William O. Bartlett, Esq.: Dear Sir—In June last, an experiment was tried on this farm with one of your Double Plows, on a piece of land intended for turnips, somewhat rocky, with a hard sward, not having been plowed for many years, and many bunches of bushes growing upon it.

The plow appeared to work well, and Mr. Wright, who has been our principal farmer for many years, was greatly pleased with it. The furrows were as well laid, as I thought, as they could have been with any single plow.

Mr. Taylor, who lives on my farm in New Hampshire, wishes me to send him a Double Plow. His land is level, rather a rich loam, and entirely free from stones. He thinks that with a Double plow and a pair of horses, with a light hand to hold, he could easily plow three acres a day for many days in succession.

It struck me, when seeing the plow in operation, that one part steadied the other, and made the work smooth and even. The saving of labor, in the use of the double plow, is too apparent to need remark.

I might add, that my turnips were never more cheaply cultivated, and never yielded so good a crop.

With much respect,

Your obedient servant,
DANIEL WEBSTER.

A BRITISH HAVNAU.—Between twenty and 30 sanguinary executions have recently taken place among the Cephaloniae, by order of the British Commissioner, Sir H. Ward, in consequence of their refusal to surrender the ring-leaders in the late disorders at the Ionian Islands.

A clergyman, lecturing one afternoon to his female parishioners, said—“Be not proud that our Lord paid your sex the distinguished honor of appearing first to a female after the resurrection, for it was only done that the glad news might spread the sooner.”

From the American Farmer.

**Prize Essay on the Culture and Management of
TOBACCO.**

By W. W. W. BOWIE, Esq., of Prince George's Co., Md.

A rich loam is the soil for Tobacco plants. The spot selected for a bed, should be the south side of a gentle elevation as well protected as possible by woods or shrubbery; a warm spot, mellow ground, perfectly pulverized. After a thorough burning of brush and tobacco stalks mixed, dig deep, and continue to dig, rake and chop, until every clod, root and stone be removed, then level and pulverize nicely with the rake. Mix one gill of seed for every ten square yards, with a quart or half a gallon of plaster or sifted ashes, to every half pint of seed, and sow it regularly, in the same manner that gardeners sow small seeds, only with a heavier hand. Roll with a hand roller or tramp it with the feet. If the bed be sown early, it ought to be covered with brush free from leaves; but it is not necessary to cover them after the middle of March. Tobacco beds may be sown at any time during winter, if the ground be not too wet or frozen. The best time, for sowing is from the 10th to the 20th of March, although it is safest to sow at intervals, whenever the land is in fine order for working. Never sow unless the land be in good order, for the work will be then thrown away if the land be too moist, or be not perfectly prepared. The beds must be kept free from grass and weeds, until they are no longer needed, and the grass must be picked out a sprig at a time by the fingers. It is a tedious and troublesome operation, therefore planters should be very careful not to use any manures on their beds which have grass seeds or weeds in them. After the plants are up they should receive a slight top dressing of manure once a week, sown broadcast by the hand; this manure should be composed of half a bushel of unleached ashes, or one bushel of burnt turf, one bushel of fresh virgin woods earth, one gallon of plaster, half a gallon of soot, one quart of salt dissolved in two gallons of liquid from the barn yards and four pounds of pulverized sulphur, the whole well intermixed. Let a large quantity be got together early in the winter and put away in barrels for use when wanted. This and other such mixtures have been found efficacious in arresting the ravages of the Fly,—both from the frequent dusting of the plants and the increased vigor which it imparts to them, thereby enabling the plant the sooner to get out of that tender state in which the fly is most destructive to it. The fly is a small black insect, somewhat like the flea, and delights in cold, dry, harsh weather, but disappearing with the mild showers and hot sun of opening summer. If possible the plants should stand in the bed from half an inch to an inch apart, and if they are too thick they must be

raked when they have generally become as large as a five or ten cent piece. The rake proper for the purpose should be a small common rake, with iron teeth, three inches long, curved at the points; teeth flat, and three eighths of an inch wide and set half an inch apart.

After culture, &c.—The soil best adapted to the growth of Tobacco is a light friable soil, or what is called a sandy loam, not too flat, but rolling undulating land—not liable to drown in excessive rains. New land is far better than old. Ashes are decidedly superior to any other fertilizer for Tobacco. Theory and practice unite in sustaining this assertion. The land intended for Tobacco should be well plowed in April, taking care to turn the turf completely under and subsoiling any portions that may be stiff and likely to hold water near the surface, and let the land be well harrowed directly after the breaking up; it should then be kept clean, light and well pulverized by occasional working with cultivators and light harrows, so as not to disturb the turf beneath the surface. When the plants are of good size for transplanting, and the ground in good order for their reception, the land or so much as can be planted in a season, should be "scraped," which is done by running parallel furrows with a small seeding plow, two and a half feet apart, and then crossing these again at right angles, preserving the same distance, which leaves the ground divided in checks or squares of two and a half or three feet each. The hoes are then put to work and the hill is formed by drawing the two front angles of the square into the hollow or middle, and then smoothed on top, and 'patted' by one blow of the hoe. The furrows should be run shallow, for the hills should be low and levelled off on the top, and, if possible, a slight depression near the centre, so as to collect the water near the plant. The first fine rain thereafter, the plants should be removed from the seed beds, and one carefully planted in each hill. A brisk man can plant ten thousand plants per day. The smaller or weaker hands, with baskets filled with plants, precede the planters and drop the plants on the hills. In drawing the plants from the bed, and in carrying them to the ground, great care should be taken not to bruise or mash them. They ought to be put in baskets or in barrels, if removed in carts, so that not many will be in a heap together. The plants should never be dropped deeper than when they stood in the bed. Planting is done by seizing the plants dropped on the hill, with the left hand, while with one finger of the right hand, a hole is made in the centre of the hill, and the root of the plant put in with the left, while the dirt is well closed about the roots by pressing the fore finger and thumb of the right hand on each side of the plant, taking care to close the earth well about the bottom of the root. If sticks are used to plant with, they should

be short, and the planter should be particular not to make the holes too deep. The plants should be very carefully planted, for if the roots are put in crooked and bent up, the plant may live, but will never flourish, and perhaps when too late to replant, it will die, and then all the labor will be of no avail. In three or four days it may be hoed out, that is, the hoes are passed near the plants, and the hard crust formed on the hills pulled away, and the edges of the hill pulled down in the furrows; this is easily done if performed soon after planting, but if delayed, and the ground gets grassy it will then be found a troublesome operation. After 'weeding' out, put a teaspoonful or a gill if preferred, of equal parts of plaster and ashes well mixed, upon each plant. In a few days, say a week or less time, run a small plow through it, going twice in a row. This is a delicate operation, and requires a steady horse and a skilful plowman, for without great care the pladts will be knocked up or be killed by the working. In a week after the tobacco cultivator or shovel must be used. These implements are well made by R. Sinclair, Jr. & Co. of Baltimore. Either implement is valuable at this stage of the crop. But once in a row is often enough for either cultivator or shovel to pass. The crop can now be made with their use by working the Tobacco once a week or ten days, for four or five weeks, going each time across the former working. Any grass growing near the root of the plant should be pulled out by hand. As soon as the Tobacco has become too large to work without injuring the leaves by the swingle tree, the hoes should pass through it, drawing a little earth to the plants when required, and level the furrows caused by the cultivator and shovel. Let this hoing be well done and the crop wants no more working. Care should be taken to leave the land as level as possible, for level culture is most generally best. When it blossom the best plants ought to be selected for seed; one hundred plants being enough to save for seed to sow a crop of forty thousand pounds. All the rest should be 'topt' before they blossom—indeed as soon as soon as the blossom is fairly formed. It should be topt down to the leaves that are six inches long, if early in the season, but if late still lower. If the season be favorable, in two weeks after a plant has been "topt" it will be fit for "cutting" yet it will not suffer by standing longer in the field. From this stage of the crop until it is in the house, it is a source of great solicitude and vexation to the planter. He is fearful of storms, of frost and *worms*, his worst enemy—and the 'suckers' are to be pulled off, and the 'ground leaves' to are to be saved. The 'suckers' ought to pulled off when they get three or four inches long; they spring out abundantly from each leaf where it joins the stock. 'Ground leaves' are those leaves at the bottom of the plant which be-

come dry on the stalk and ought to gathered early in the morning when they will not crumble.

The Worms ought to be pulled off and killed as fast as they appear, or they will destroy the crop. Turkeys are of great assistance in destroying these insects,—they eat them and kill thousands which they do not eat, for it seems to be cherished amusement of the Turkey to kill worms in Tobacco—they grow passionately fond of it—they kill for the love of killing. There are every year two 'gluts,' as they are called by planters,—the first, attacking the plants about the time that they are one third or half grown, the other, comes on when the Tobacco is ready for cutting. The first can easily be subdued with a good supply of Turkeys, and if then they are effectually destroyed, the second glut will be very easy to manage, for it is the opinion of many intelligent and experienced planters that the greater portion of the first glut re-appear the same year as Hornblowers and breed myriads. When the second army of worms makes its appearance, the Tobacco is generally so large that Turkeys do but little good. The only method then to destroy them is to begin in time, start when they are being hatched, and keep up a strict watch upon them going over the whole field, plant by plant, and breaking the eggs—killing such as may be seen, and by constant attention during each morning and evening to this business alone, with the whole force of the farm, they may be prevented from doing much harm. When they disappear the second time, there is no more cause of trouble. For a full entomological description of the Tobacco worm, and the easiest and most effectual method of rendering them entirely harmless, I beg leave to refer the reader to a letter, written to J. S. Skinner, Esq. by the author of this essay, and published in the Farmers' Library in 1848. When the plant begins to yellow, it is time to put it away. It is cut off close to the ground by turning up the leaves and striking with a Tobacco knife, formed of an old sytd—such knives as are often used for cutting corn. Let it lie on the ground for a short time to 'fall' or wilt, and then carry it to the Tobacco house, when it may be put away in three different modes, by 'peging,' 'spearing,' and by 'splitting.' 'Peing' Tobacco is the neatest and best mode, yet the slowest. It is done by driving little pegs, about six inches long and half an inch, or less square, into the stalk about from the big end of the stalk, and these pegs are driven in with a mallet, in a slanting direction, so as to hook on the sticks in the house. It is then put on a 'horse,' which by a rope fixed to one corner, is pulled up in the house and there hung upon the sticks, which are regulated at proper distances. A 'Tobacco horse' is nothing more than three small sticks nailed together so as to form a triangle, each side being three or four feet long. Spearing is the plain

pursue, because it is neat enough and decidedly the quick-est plan. A rough block with a hole morticed in it, and a little fork a few inches from the hole for the Tobacco stick to rest upon, one end being in the hole, with a spear on the other end of the stick, is all the apparatus required. The plant is then with both hands run over the spear, and thus strung upon the stick, which when full is taken to the house and hung up at once. There are "dart spears," like the Indian dart in form, and "ground-spears," either however will answer.

"Splitting" Tobacco is admired by many who contend that it cures brighter, certainly quicker and less likely to *house-burn* or injure from too thick hanging. This mode is pursued easily by simply splitting, with a knife made for the purpose, the plant from the top to within a few inches of the bottom, before it is cut down for housing. Care should be taken not to break the leaves while splitting the stalk. The knife for splitting may be fully described by saying it is a miniature spade. It can be easily made out of an old scythe blade, inserted in a cleft white oak handle, with its edges bevelled off to the blade, so that it acts as a wedge to the descending knife. After the Tobacco is split, cut down and carried to the house, it is straddled across the sticks and hung up. The sticks are generally supported by forks driven in the ground near the heap of Tobacco, for greater convenience to the person putting on the plants.

Tobacco sticks, are small round sticks, or are split out like laths, and are about one inch square, or one and a half inch square, usually larger at one end than the other, and they should be eight or ten inches longer than the joists of the Tobacco house are wide apart.—If the Tobacco is of good size six or seven plants are enough on a four foot stick. When first hung up the sticks should be a foot or fifteen inches apart. As the Tobacco cures they may be pushed up closer. After a house is filled, some planters put large fires under it, as soon as it has turned yellow, and by hot fires it is dried at once and does not change color, unless to increase its brightness, but "firing" gives a smoke, smell and taste that is therefore not much liked by buyers.—The cost of labor and loss of wood, and the risk of losing Tobacco, and the house too, are great objections well urged against *firing*. The better plan is to have sufficient house-room and hang it thin in houses not too large, which have windows and doors so as to admit light, and dry air, and by closing them in bad weather exclude the rain and dampness which materially damage the Tobacco, beside injuring the color of it. After becoming dry and well cured, the stem of the leaf being free from sap, the first mild damp spell of weather it will become soft and pliant, and then be stript off the stalk. It is first pulled, or taken off the sticks and put in piles, then the leaves are stript off and tied in bundles of about one fifth or sixth of a lb. in each. The bundle is formed by wrapping a leaf around the upper part of the handful of leaves, for about four inches, and tucking the end in the middle of the bundle by way of confining it. There ought, if the quality of the crop will permit, be four sorts of Tobacco, "Yellow," "Bright," "Dull" and "Second." When the Tobacco is taken down, the "cullers" take each plant and pull off the defective and trashy ground and worm-eaten leaves that are next to the big end of the stalk, and then throw the plant to the next person, who strips off all the bright leaves (and if there be any yellow leaves, he lays them one side until he has got enough to make a bundle,) and throws the plant to the next, who takes off all the rest, being the "dull," and the respective strippers as they get enough leaves in hand, tie up the bundles and throw them separate for convenience in bulking. Stripping should never be done in drying, or harsh weather, unless the Tobacco is bulked up almost as fast as it is stript. The best plan is not to take down more than you can conveniently tie up in a few hours, but if the planter chooses he may take down a large quantity and

put it in bulk, stalks and all, cover it with Tobacco sticks, and it will keep many days, so that no matter how the weather be, he can strip out of the bulk.—However, this is a very bad, wasteful way. Tobacco should not be too moist or "high" as it is termed, when put in the stalk-bulks, or it will get warm, the leaves stick to the stalk, get a bad smell, and change color; beside, if left too long it will rot. To "bulk" Tobacco it requires judgment and neatness. Two logs should be laid parallel to each other about thirty inches apart, and the space between them filled with sticks, for the purpose of keeping the Tobacco from the dampness of the ground. The bundles are then taken one at a time, spread out and smoothed down, which is most conveniently done by putting it against the breast and stroking the leaves downward, smooth and straight with the right hand. It is then passed, two bundles at a time to the man bulking. He takes them, lays them down and presses them with his hands; they are laid two at a time in a straight line—the broad part of the bundles slightly projecting over the next two, and two rows of bundles are put in a bulk, both rows carried on together, the heads being on the outside and the tails just lapping one over the other in regular succession. The bulk when carried up to a convenient height should have a few sticks laid on the top to keep it in place. It must often be examined, and if getting warm, it ought to be immediately changed and laid down in another bulk, of less height, and not pressed as it is laid down; this is called "wind-rowing;" being loose and open, it admits the air between the rows of bundles, hence the term. The next process in this troublesome but beautiful crop is to "condition" it for "packing." The bright, yellow and second Tobacco will condition best most generally in such bulks as I have just described, but it is best to hang up the dull as soon almost as stript. If the bright or seconds do not dry thoroughly in the bulks, that should also be hung up in the house to become well dried. To properly hang up Tobacco to condition, small sized sticks should be procured, and each one nicely smoothed with the drawing knife and kept for that purpose. After it has once been perfectly dry either hanging up or in bulks—so dry that the heads are easily knocked off and the shoulders of the bundles crack upon pressure like pipe stems—it should be taken down, or, if in bulk, removed the first soft giving spell of weather, as soon as it is soft and yielding enough, as it will become, to handle without breaking, and it must be put in four, six or eight row bulks of any convenient length and height, the higher the better—laid down close so that as little of the leaves or shoulders as possible shall be exposed on the outside of the bulks.—When completed, put sticks and logs of wood, &c. &c., on the top, so as to weight it down. Here it will keep sweet and in nice order for packing at any time, no matter what the weather may be.

In stripping and assorting, care must be taken to class it according to quality. It is best to have at least three classes. In the 1st class, you will put all your finest leaves; with the 2d, the short and ragged leaf, or the next best leaves; the balance put to the lugs, after throwing away all trashy and worthless leaves. When the tobacco is stripped, it should be immediately rehung (unless it is designed to carry it to market in the winter,) hoisted up in the house, and crowded close together. Let it remain in this way until spring, when it may be opened and taken down in good keeping order for prizing. This should always be done at the time of a warm season, when the wind blows from the South—never when the wind is from the North or East. The hogsheads should be made of seasoned pine or poplar boards, 4 1-2 feet in length, and 42 inches at the top head, and 40 inches at the lower, in diameter. The boards should be 5-8 of an inch thick, and 4 or 5 inches wide, and dressed at least on the inside, and set up and hooped all off with eight strong hoops to the hogshead. The heading plank should be inch pine or poplar sea-

soned plank. In packing the tobacco into hogsheads, put four courses into a layer; change the direction of the bundles in each layer. Put in about 400 lbs. into the hogshead before putting the hogshead under prize; then press down moderately and fill up again, and so on until you put about 1,300 lbs. into a hogshead. This quantity is enough of fine tobacco to put into one hogshead. If more than this is put into a hogshead, it will be very apt to be injured by prizing it too hard. Inferior qualities may be prized harder.

The soil on which to grow shipping tobacco should be rich bottom land or highly manured lot land; the richer the land, the better. The land designed for tobacco of this character, if bottom land, should be bedded in fifteen feet beds, and well harrowed and rolled; then lay off four rows on a bed, which would give 4 feet 9 inches to the row; then lay off the rows across the bed 3 1-2 feet apart. The best implements to cultivate tobacco on this kind of land is the cultivator and hoe, which should be used frequently. The best manure for tobacco of this kind is stable and farm pen manure, well plastered and laid on thick. When it is ripe, and not till it is ripe, it should be cut and scaffolded a few days until it begins to yellow a little; then house it, and commence firing it with a slow fire, increasing the fire, from day to day, until it is cured which will take 4 or 5 days. Fire with any kind of wood, seasoned or green, as smoke is not objectionable to shippers. After it is well cured, it may be struck and bulked, which ought draining our wet lands, clearing out obnoxious weeds not to be done earlier than 1st of December, and stripped in bad weather, and again rebulked, taking care to have each bundle well straightened before it is bulked down. 4 leaves to the bundle, if the tobacco is large, will be the right number. Let it remain in bulk till spring, when it must be rehung and weather dried, and taken down in dry keeping order and packed in boxes, and well weighted. Prize into such hogsheads as I have recommended for manufacturing tobacco; put fifteen hundred pounds in a hogshead; and then sell for the very highest price you can get.

I have long been of opinion that it would be to the interest of planters not to make more than half as much tobacco as they do. I believe, if the quantity was lessened one-half, the demand would be proportionately increased. If we could get as much or nearly so for half a crop as we now realize for a full one, it certainly would be good policy to cultivate a small crop—say one acre to the hand, instead of two, as is now generally done. If such a state of things could be brought about by mutual consent among tobacco growers, as to the quantity they would cultivate to the hand, a vast deal of labor and time would be saved, which I would recommend should be directed to the raising manure, and useless stones, and in this way increase the fertility and productiveness of our farms, and the comforts and pleasure of home.

The blood of which God has made all nations of the earth, is not much felt yet as being one blood; but our having shared in it, will be a near relationship when we human creatures are scattered thinly among the hosts of Heaven. Then, to have been of the same generation will be like having been of the same family; and down long streets of stars we shall all look back at this world, as the little home we all lived in once. * * * Years ago a beggar and I exchanged looks on a road side, and we have never seen one another since, and never shall again in this world; but after many ages, perhaps we shall find ourselves standing side by side, looking up at the throne.”

CLEON AND I.

Cleon hath a million acres—
Ne'er a one have I;
Cleon dwelleth in a palace—
In a cottage I;
Cleon hath a dozen fortunes—
Not a penny I;
But the poorer of the twain, is
Cleon, and not I.
Cleon, true, possesseth acres,
But the landscape I;
Half the charms to me it yieldeth,
Money cannot buy;
Cleon harbors sloth and dullness—
Freshening vigor I;
He in velvet, I in tustian,
Richer man am I.
Cleon is a slave to grandeur—
Free as thought am I;
Cleon fees a score of doctors—
Need of none have I;
Wealth-surrounded, care environed,
Cleon fears to die;
Death may come he'll find me ready—
Happier man am I.
Cleon sees no charm in nature—
In a daisy I;
Cleon hears no anthem ringing
In the sea and sky;
Nature sings to me forever—
Earnest listener I;
State for state, with all attendants,
Who would change?—Not I.

DISTEMPER IN DOGS.—P. A. Wray, of Montgomery Alabama, furnishes the Southern Planter with the following recipe for the cure of this fatal malady to the canine race:

“Lay your dog down, and just before the hind legs on each side, and over the lungs, put about a tea-spoonful of spirits of turpentine. This will make the animal mad for a while, but in forty-eight hours he will be sound and well; so you will end the chapter on dog distemper.”

DO NOT MIX YOUR POTATOES.—Perhaps it may not be known to every person who raises potatoes to sell, that in the N. York markets, there is one half difference in the price. This is not always owing to the superiority of one variety over another, but the fancy or preference of the buyer of his favorite kind. Some are partial to the pink eyes—some to the kidneys, while others prefer the Carter, the black, Diceman's seedling, blue noses, lady's fingers, &c., all of which have their excellencies, and when brought to market by themselves, will always be sure to find a ready sale; but when mixed one with the other, many housekeepers will not buy them at all. We had many orders last spring for particular kinds of seed potatoes, and, and in many instances had much trouble. In one or two cases, we were obliged to sort out the kinds wanted, in the hold of a vessel. We cannot too earnestly enjoin upon all growers of this estimable vegetable to cultivate each variety on a separate piece of ground, or to sort them at the time of digging, which will be attended with very little additional expense, but will well compensate them for trouble.—*Albany Cultivator.*

From the Louisville Journal.

Durability of Fences.

Of the large territory within the limits of Kentucky, about eighteen millions of acres only are listed for taxation. Of these eighteen millions, what portion is enclosed by fence must remain, during our present imperfect system of gathering agricultural statistics, mere matter of conjecture. But, if any inference can be drawn from the extent of the corn crops and the ratio which other tillable and pasture lands bear to corn lands in common farming, it will not be an extravagant estimate to set down the enclosed fields of the commonwealth at six millions of acres. If these fields were of the average area of 40 acres, which is much above truth, it would require 960,000,000, rails to complete the enclosure, which, at the low price of one dollar per hundred for making and putting up, would equal nine millions six hundred thousand dollars. If, again, we appeal to experience, I think it will warrant the assertion that the average duration of rail fences, made of all timbers and cut without regard to season, and with the bark upon the sap rails, will not exceed eight years. If this estimate for duration be true, then the interest of agriculture is subjected to a yearly tax of one million two hundred thousand dollars, simply for repairing fences, taking no account of the cost of timber, which must swell the annual outlay to more than one and a half millions.

There is another method of approaching truth on this subject, which is the estimating of a fair hire for the two hundred thousand agricultural laborers of the State, during the many weeks spent in the course of every year in making and repairing fences. From this aspect of the subject we shall again be forced to conclude that the business of fencing absorbs a considerable portion of the farmer's time. Any system of practical economy, therefore, which can be brought to bear upon this subject and aid in husbanding labor, is highly deserving the attention of the agriculturist.

The extreme simplicity of the practice to which I mainly, in this article, intended to direct the attention of the economist forbids one's endeavoring to set up for it any exalted claims; yet simple and unpretending as it is, I think, if generally adopted, it would more than double the duration of all sap rails, and perhaps add twenty five per cent. in the aggregate to the period for which fences are now expected to last. If so, the saving to agriculture would in the aggregate be a sum greater than is now required to support our State government, with all its interest account. This would be a consummation greatly to be desired—an achievement which might well warrant the government in disbursing a small modicum of the national wealth, thus gained, in the shape of bounties to experimenters, who

might thereby be tempted to enter the lists in any contest for truth in this unexplored field of practical economy.

But, to proceed with explaining this method of fencing, I may remark that it consists rather in doing the work at a particular time than in a particular manner. In cutting and splitting the rails when the sap is in motion and stripping the sap rail of its bark, which is the hastening agency that brings about rapid decay, chemistry has established undeniably the fact that putrefaction is contagious, and we cannot prevent its attack upon timber unless moisture be excluded; nor where the wood is affected can the contagion be arrested, unless coming into contact with parts rendered impervious to water by the presence of some of the bases acting as antiseptics, as is the case with the heart wood of walnut and some other timbers. Now the cortical layers are mostly cellular tissue, and hold water as a sponge. In the system of bark, putrefaction speedily begins. The wood worm so soon commences the work of destruction upon the sap wood that one is almost led to conclude that, like the vulture, he is ever hovering round ready to seize upon his victim as soon as life is extinct in any object of the vegetable kingdom. Almost as soon as the bark is affected, the sap wood by contiguity receives the contagion, and the work of decay is ever after onward. When the tree is deprived of its bark, a gummy exudation covers as if with paint the surface. It soon dries, and, water being absent, decay cannot begin.

The friend who first suggested this practice to me stated that by his experience there was little difference in the last of rails if all were stripped of their bark. He remarked that buckeye was scarcely less durable than walnut. At his suggestion, in the summer of 1825, I enclosed a small field with rails so prepared. This place was occupied by myself first and afterward by an intimate friend, for twenty years, during all which time not a rail was added to the fence, because none seemed wanting. What has been its history since I cannot say. Two other examples of its efficacy have come under my knowledge. Traveling in Ohio, I once observed a barn built of round logs, the bark of which, at the distance of a hundred yards, looked as if painted of a dove color, every log sound, not a worm hole to be seen. Looking at the body and not the roof, a stranger would have supposed it less than six years old, yet upon inquiry it was found to have been standing over forty years. Again, in the year 1786, one of the pioneers of Kentucky, by way of displaying taste in the construction of an out-building, felled and peeled a set of hickory logs. Fifty years after, his son found the corners of the edifice decayed, but the body of the house sound; and, actuated by a double motive of preserving those pleasing reminiscences which grow

out of the associations of childhood, he caused these logs to be shortened and rebuilt into a house, which, at the end of another half century, may exist as a monument of filial regard, and as a testimonial that the practice of stripping the bark from timber at the moment it is felled in the forest will compare favorably with all other modes of preparation, if it does not actually surpass the best of them, so far as durability is concerned.

From the Wool Grower.

Prospects for Wool Growers.

The wool growing of the Union is in its infancy, and has hardly begun to assume the importance in the list of products of the country, which it deserves.

It is a common remark among a great many farmers that they do not engage in wool growing because it cannot long be profitable, by reason of over production in wool. Such is undoubtedly the opinion of nine tenths of the farmers of the country—that it is a very erroneous, and withal a very injurious opinion—we propose to show in this article.

If it were possible, it would be an important fact to ascertain what amount of cloth, either all wool, or wool mixed with other material, is consumed by each person or family annually throughout the Union. In the northern, middle, and western States, the annual consumption (all things being equal) will be nearly alike to each family or person.

We will take our own family then as an average for our basis of calculations. It consists of three children, under ten years, and two adult persons. We use for personal wear and bedding of flannel, 25 yards, narrow or fulled cloth, 14 yards; broadcloth 10 yards, or 49 yards in all. To make this cloth, would require at least 30 lbs. of wool, as it is usually sold by the grower. This gives then, 6 lbs. of wool as the annual average consumption of a single individual—that it is a low estimate, when applied to the whole union, few will doubt, if they investigate the state of their own wardrobe. It is equally true that the consumption increases in a greater ratio than the population. Taking the population of the Union at twenty two millions, and we have an annual consumption for sheep's wool, of one hundred and thirty-two millions of pounds; worth to the producer, about thirty-seven millions of dollars.

To produce this amount of wool, will require not less than sixty millions of sheep. For allowing the average yield per head, to be equal to three pounds, it would require about forty-five millions of fleeces, and to these should be added about thirty per cent, for sheep under one year old.

The whole number of sheep of all ages that will be in the Union at the commencement of the next clip, will not exceed thirty millions, of

which about twenty-four millions will be shorn, yielding not far from seventy-two million pounds, or little more than one half of the annual consumption. It is an undoubted fact then, that we do not produce wool enough throughout this whole Union, by at least sixty-five millions of pounds for our own consumption. The deficiency is made up from importations of foreign wool, to the amount of about twenty millions, and manufactured goods to the extent of nearly or quite fifty-five millions more.

The foreign wool now imported, is for the most part of a low grade, while the amount imported in a manufactured state, is of the finer kinds, and comes in direct competition with the fine and most valuable goods. The raw material is paid for by our own manufactured articles, and farmers of the Union make a profit upon the food which is consumed by the artizan in working it up.—But no one is benefitted except the foreign farmer and manufacturer, by the import and consumption of the manufactured article. It would be something in our favor if we exported the raw material, but the amount of wool exported is so small that it is not worth mentioning.

The countries from whence we import most of our woolen fabric, are England, Germany, and France; England supplying the largest quantity. She imports about seventy million pounds of wool; the finest from Germany, the next best quality from her Australian colonies, and the balance from the four quarters of the globe, always excepting the United States,

According to all the principles of political economy, then, if there were now thirty millions more sheep, or double the number we now possess, we should find a market for all the wool at home.

But the question may well be asked, if that large amount were added to the present supply, would not the price rule so low as to make it no object to grow wool? We answer, there is no danger of its ever being so low as not to pay as well if not better than any other kind of farming. For notwithstanding the prosperous condition of the grain and dairy interests, especially at the west, wool growing has constantly increased, as is shown by the quantity of wool received at, and passed from, the canal collector's office, at this city and Black Rock, for the last five years.

1849	-	-	-	lbs.	8,100,000
1848	-	-	-	"	6,200,000
1847	-	-	-	"	6,000,000
1846	-	-	-	"	4,300,000
1845	-	-	-	"	4,400,000

This increase, it must be borne in mind, has been in the face of very high prices for grain, and comparative low prices for wool. But the price of grain is ruling low now, and must continue to do so for a series of years, while there is no prospect of wool becoming any less in price than it has been here and Westward.

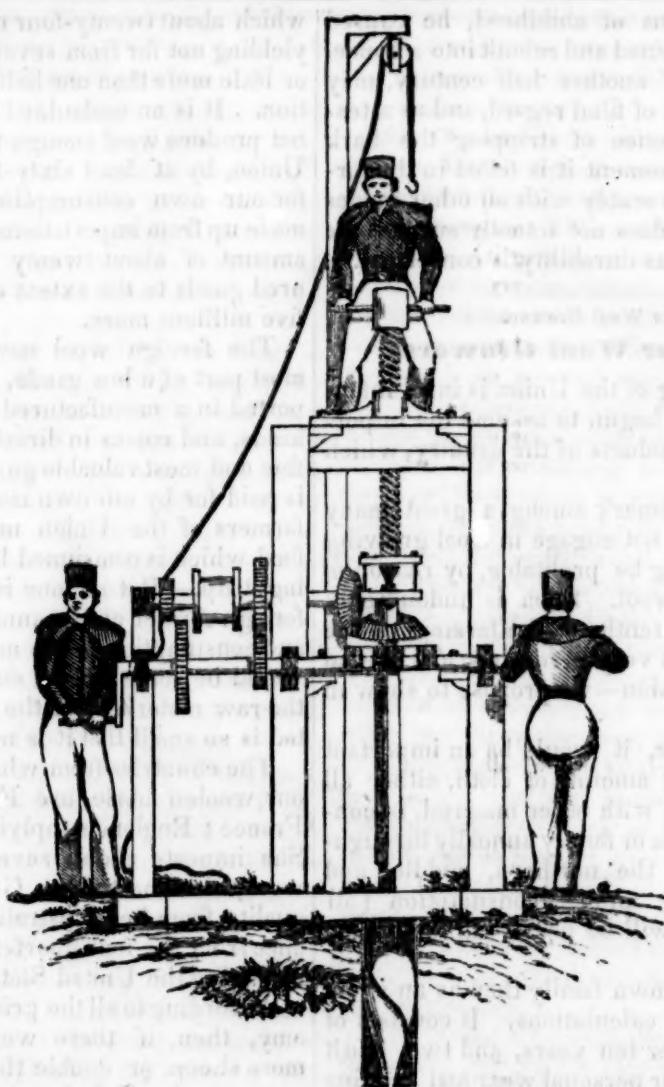


Fig. 7.

Hydraulics for the Farm.

NUMBER THREE.

An economical process has been practiced of late years for obtaining water from great depths, without the expense of sinking a well. This process consists simply in boring the earth with an auger and other proper instruments to a considerable depth, and in most situations water will flow either to the surface or to within a short distance from it; in some places it has been known to spout to a considerable height above it. The supposition that the springs whence the supply is derived must be connected with an elevated reservoir by subterranean channels is not an explanation that is altogether free from difficulty.

These wells are called 'Artesian wells,' (*Puits Artesiens*) from the supposition that they were first used in the district of Artois in France, which is an error, as we shall endeavor to show. About the year 1824 M. Peligot, one of the superintendents of the hospitals at Paris, suggested the idea of sinking a well upon the principle now called "Artesian," and workmen were sent

from Artois for the purpose ; whilst this was being effected, M. Mulot, a smith, became interested in the operation, and turned his attention to the subject ; he also devised means for facilitating the work. He was consequently employed by the Marchioness de Groslier to sink one at Epinay ; success attended his efforts, and he was nominated to attempt one at Grenoble, which he successfully completed, having penetrated to the depth of 2,600 feet.

The principal soils are but rarely stratified, or are found in regular beds. The fissures in granitic rocks, the crevices separating the contiguous masses, have but little width or depth, and do not frequently communicate with each other. In such soils the waters of filtration have but limited outlets, each film or thread terminating its course alone, without receiving any increase from others in their descent.

The secondary soils, which are composed of a variety of rocks, in general take the form of immense reservoirs or basins, the centre being considerably depressed, or the extreme termination of it greatly elevated. Within this elevation

hills, and often mountains arise, apparently destroying its original character. The stratification of the secondary formation is in regular beds, some of which are of enormous thickness, composed of sand or grit, and very permeable; these permeable beds as they rise towards the extremity of the basin, become bare on the sides of the mountains and hills. The rain water which falls on the earth after penetrating it, forms one continuous sheet, which pursues its course with great rapidity when the beds have a great declivity, and, reaching the lowest point, is accumulated in vast quantities. One chalky or calcareous stratum which is furrowed out in all directions, and particularly in the upper portion, allows the pluvial water to pass with great facility and also to circulate through the mass to a great depth: and in this particular stratum the wells of Rouen and Grenoble have been bore'. The work was commenced on the 30th of Nov. 1833, by M. Mulot, and water was obtained in Feb. 1844, at an expense of three hundred and three thousand francs.

As the question is one of importance, and as there is a company in embryo in this city for the purpose, we have collected all the information that we deem necessary at this time. Mr. Boehner, an engineer of eminence in his profession, is engaged in sinking one of small bore for Mr. Belcher, at his works in the upper part of the city. He is the inventor of a new improvement in machines for boreing. We head this article with an engraving of it.

Prices per foot for sinking.—4 inch hole, 100 feet deep, \$200; from 100 to 500 feet, \$5 per foot. 6 inch hole, first 100 feet, \$500; to 500 feet \$700. 9 inch hole \$10 per foot, when under 500 feet. 12 inch pipe, \$15 per foot, when under 500 feet. 18 inch pipe, \$25 per foot, to 2,000 feet.

From the American Agriculturist.

HOME DEPARTMENT AGRICULTURAL REPORT.

It gives us much pleasure to state, that our old friend, Dr. Lee, has been appointed to make up the Agricultural Report of the Home Department. He has been favorably known for some time past as the editor of the Genesee Farmer and Southern Cultivator, and from his intimate acquaintance with agriculture, we shall expect to see an able and reliable report from him. The following is his Circular:—

To favor this undertaking, I respectfully solicit information on all topics appropriate for such a document, and particularly in reference to the inland commerce of the country. The movements of agricultural products on lakes, rivers, canals and railways, is a subject of interest to all intelligent farmers and business men.

Crude guessing in regard to the quantity of grain and other crops grown in the current year, can possess but little value a few months in advance of the U. S. census, so soon to be taken. Improvement in the practice, and progress in the science of agriculture are objects of great moment at this particular time. The public mind is now more engaged in the work of improving lands, and educating young men not less thoroughly to be farmers than doctors or lawyers are professionally educated, than at any earlier period. Thousands begin to appreciate the fact, that, no limited piece of earth can possibly contain an unlimited quantity of the atoms ne-

cessary to form good crops of grain, cotton, tobacco, or potatoes. The elements of bread and meat in any given soil or field being quite limited, the waste of these elements, when extended over many millions of acres, becomes a matter of paramount national importance.—That the quantity of atoms in every cubic foot of soil, or earth, which can be transformed into wheat, is uniform or alike in all cases, no observing farmer can for a moment believe. If this were the case, then all soils would be alike productive of this valuable crop.

Different soils of varying fertility, possess equally varying amounts of the available constituents of all cultivated plants. If the supply of raw material for making all crops is really inexhaustible, why should any man ever be at the trouble and expense of hauling manure, or of purchasing lime, ashes, gypsum or guano? The use of fertilisers tells the whole story—that the elements of bread and meat may be used up—wasted—utterly lost to the husbandman and the world. How much has been lost to the country since the beginning of the present century? Who can tell?

Great complaint is made by persons belonging to the American navy of the defective manner in which beef, pork and butter are put up for consumption in tropical climates in this country. The navies of European nations are supplied with these perishable commodities in a condition to keep under the equator much longer and better than similar articles made in the United States. This defect is not creditable to American skill in curing meat, butter, and cheese. Nor is the preservation of breadstuffs so generally understood as is desirable.

Information on these and other subjects is sought not only at home, but from foreign nations with whom we have commercial and diplomatic intercourse. The collection and diffusion of useful knowledge in the cheapest possible form, are labors in which many can participate.

Should not the young men of America be reminded of their duty in this connection? Look on the broad surface of the Union, and mark the millions of acres of native forests which have fallen and disappeared at the approach of the woodman and his axe. The continued toil of the farmer has dug from the virgin earth early the whole wealth of the country. If no damage had been done to the lands under cultivation, our admiration of the industry, enterprise, and success with which they have been plowed, hoed, and harvested, would be unmixed with regret. But unfortunately, many millions of acres of American soil have suffered incalculable, if not irreparable injury. The economical renovation of partially exhausted fields, and the cheap improvements of all farming lands that need it, are objects to which much time and study may be profitably devoted.

DANIEL LEE.

Washington, Dec., 1849.

BEET ROOT SUGAR.—Beet root is fast superceding the cane sugar in various parts of Germany. Good strong loaves manufactured from cane sugar, by the refineries at Seittin and Berlin, cost \$18 per cwt. A quality in every way equivalent, in color as well as strength, and being of a pure taste, made at Magdeburg from beet roots, sells at \$17, or from five to six cents less; and with such a price, it leaves a clear profit of 20 percent.

The progress made in this branch of industry is astounding. The produce of two sugar houses in that neighborhood, is of such superior quality, that in none of the refineries within the boundaries of the custom union who use cane sugar, is an article made which could successfully compete with it. A number of new establishments are being erected every year in that district, (within a circuit of from six to eight German miles) on the left bank of the Elbe, and in this season, the quantity of beet root sugar produced there will exceed 200,000 cwt.—Olive Branch.

A CHINESE FARM-HOUSE.—The farm, however small, is not so much the estate of an individual proprietor as the home of a family, or seat of a clan, many generations of which, under one acknowledged head or patriarch, are often congregated in the same dwelling. As the farm houses in general differ but little from each other except in size, I will endeavor to give the reader a description of one. In a small island, formed by a moat for the supply of water and the rearing of ducks and geese, well sheltered by bamboos and other trees, and nearly hid from view, stands the house, consisting of one floor only, built, when possible of stone in other cases of brick (of so superior quality as to become an article of commerce with this country, and find its way to Liverpool) or of wood. In the centre is a large hall, called the "Hall of Ancestors," common to all the family. In it are arranged the household gods (among which are invariably the Taoist divinities, presiding over hearing and sight) and relics, such as an ancestral picture, in the most conspicuous part of the wall, on each side of which is an aphorism of Confucius, and in front of, a table bearing incense-burners and fruits as offerings, and ornamental vases, &c. The hall also served as a dry-room for their seeds, and a depository for the smaller implements of husbandry. It is the scene of their entertainments, many of their festivals, and the adoration of their gods, but never used for culinary purposes. This forms the nucleus of the building; around it are the dwelling rooms of the different divisions of the tribe, and as often as a marriage takes place, an apartment is added for the newly-wedded couple; and, time, the whole presents rather the appearance of village than a single dwelling-house. The furniture of each family consists of a bed highly ornamented, in many cases carved, and richly inlaid with ivory; a few high-backed chairs, often of bamboo; a plain polished round table, washing utensils of brass, and, in one corner of room, cooking utensils, consisting of a block fire place, in which a few round pans are set with masonry, though, in the larger establishment, the kitchen is a separate building. Around the room are several red varnished cabinets, and in these apartments the females are employed in the household duties of needle-work, spinning, &c.; a spinning-wheel and loom forming necessary appendages to each farm-house in those parts where cotton is grown. Nearly every thing for the family is home made; agricultural implements are home made and repaired; cotton is grown and spun, and made into cloths; silk worms are reared, and all the process of winding and weaving done by the family; flour is ground, cakes are baked, and samshoo is distilled from rice, as much as required stored; and the rest, and whatever other produce not wanted for home consumption, is either exchanged for other necessaries among the neighbors, or sent to some town in the vicinity to find a market. In Kiangtau, where that species of cloth better known under the name of nankeen is made, the drapers, who are proprietors of large houses in cities, hire stalls outside the walls, and meet the farmers on the road and buy their cloths, paying in bills drawn on their own houses. The live stock consists of a liber-

al supply of fowls, ducks, geese, goats, and pigs, and a dog or two (scarcely any family, however poor, is without one or more of the latter two,) together with one or two bullocks and buffaloes, according to the labor required. The buffalo is almost an amphibious animal, being constantly in the water. The implements are very simple and primitive; I almost say barbarous.—*Leut. Forbes's Five Years in China.*

From the Wisconsin Farmer.

Chess.

A CUD FOR NON-TRANSMUTATIONISTS.

MR. EDITOR: I noticed in a late number of the "Farmer" an article headed, "Chess—How is it Produced?" I eagerly perused it, hoping to receive light upon the subject. I found that conflicting arguments were adduced, and nothing particularly decisive in relation to the subject, farther than what I had before heard.

Hoping to hear something further in relation to this "unsound and unprofitable doctrine," I thought I would send you a few remarks, together with a statement of facts which came under my own observation.

During the last wheat harvest, while engaged in stacking wheat, I shelled from a single head, growing upon a single stalk, both WHEAT and CHESS, the wheat being perfectly full and plump.

Now, if this prove the doctrine of transmutation, at which it certainly does—if wheat and chess are both produced upon the same stalk, and growing from the same common root, I see no reason why those "more able and really scientific agricultural writers" should still remain inflexible, disregarding the unequivocal testimony of so many living witnesses, and still call for proof, when so many undeniable statements have heretofore been given upon this subject, seeming to do us the veracity of all who have written upon the subject. There seems to be a lack of confidence in the statements of others, and nothing, but to have it shown to them, "will be a settler to their views" on the subject.

Now, whether it be a physical, mathematical and philosophical impossibility, or not, had the "learned and talented Editor of the Geesee Farmer" been in Wisconsin, I could have given him an opportunity to have paid his premium, and "crept into a knot hole."

I have also seen fields of chess, where wheat has been sown, and where I know that one quarter of the chess was not sown, and that it must have been produced by the transmutation of the wheat, unless the statement be true, that the soil is full of chess seed, and that cultivation causes it to germinate, which idea I think to be perfectly absurd.

I think that those who oppose this doctrine would do well to be a little cautious in condemning it, as entirely contrary to the laws of nature—for her established laws cannot be broken—and we do know that chess is produced by the transmutation of wheat.

Yours, &c.,

ALFRED HITCHCOCK.

SUMMIT, Oct. 11th, 1849.

From the New York Journal of Commerce.

The Cultivation of Tea in the United States.

GOLDEN GROVE TEA PLANTATION,
Greenville, S. C., Dec., 1849.

My dear sir: In your two last communications, I notice your inquiries relating to the state of Tea cultivation. The experiment of last year, terminating this month, leaves me nothing to desire on that subject. My expectations are fully realized. The plant grows well, buds well, blossoms well, flowers well, and throws out its foliage well. Therefore I do not perceive the slightest reason to doubt that the tea plant will soon cover the sunny fields of the South with as luxuriant crops as the cotton now does. People within a stone's throw of my teagarden, ask fifty times a day, "how does your tea plant come on?" I have done answering these almost silly questions, by referring them to the garden itself for information. If it be not worth ten minutes' walk to see the 'how,' it is not worth one moment of my time to teach them. The climate for tea cultivation appears to me exactly suited to the requirements of the plant, sufficient heat in the summer, and a suitable degree of cold in winter. The aspect of my garden and the character of my soil, are not such as I could wish. But a perfect stranger in Greenville, with no one who felt the smallest interest in the matter, to advise or aid, but rather disposed to look upon the undertaking as one supremely ridiculous, I was necessitated to accept the best location I could obtain. Fortunately I limited my engagement to one acre. A plantation of about two hundred and seventy acres was offered to my notice in June, which I purchased and am now cultivating, upon Golden Grove, nine miles from the village. This plantation meets my views in respect to soil, climate, and aspect, most fully. If all be well, I shall be able to plant out forty acres this spring and summer.

I have been, and still am, very tenacious of my plants, reduced by transportation, heat, cold, drought and disease, to a very small number. A man may study medicine and think himself a doctor, but it is practice that makes him one. I have not parted with a single plant, nor a seed. In this way, I trust, I shall soon get my plantation into full seed bearing, and be able ultimately to expand my cultivation to meet the demands of the country. I cannot afford to part with my plants at present, but if you will provide half an acre of land upon the southern or western slope of a hill, not so steep as to impede cultivation, in a position where it can be irrigated in hot and droughty weather, with a sub soil of light friable clay, and rather a sandy surface soil, and moderately rich as an ordinary garden, I shall be glad to stock it with tea plants, and believe with ordinary care, they will flourish upon Long Island

But we contend that for the amount of capital involved and the attendant risk, there is no kind of farming which will clear as much money in a given number of years, as wool growing, which we will proceed to demonstrate in our next number.

They ought not to be housed, or put into a hot-house; that would weaken the vigor of the plant. In very severe weather, whilst young and delicate, they will require covering with clean straw, not with the litter of a stable; in two or three winters they will stand the temperature as well as an oak. To show this fact, I have one green tea plant in my tea garden, planted out last December, fresh from the case in which it was imported, weakened by the voyage and heat of the packing, which was never covered or protected in any way, that stood the severe cold of February last, with the thermometer at zero. The leaves which remained after transportation dropped off, but the branches and twigs, ten to fourteen inches in length, remained uninjured, and came out in April in fine leaf, and are in that condition now, as fine plants as ever grew. There the plants stand, an incontrovertible fact. This leads me to think that you would succeed in your neighborhood. I told you I had done experimenting. But it may amuse you to try your hand at it in a location where the result will be novel, be it what it may. Yours truly,

Pear Tree and Fire Blight.

I have within the last few years lost nearly all my most valuable pear trees by the disease called the 'fire blight,'—commencing at the extremities, and dying downwards. Viewing the disease very much like hydrophobia, incurable, I have felt at liberty to try all kinds of experiments, and from present indications I am satisfied that I have discovered a remedy.

I have a pear tree in my garden now sending out new shoots from every branch through a bark as black and dead as it can well be. The tree seemed dead in every limb; when I first discovered the leaves changing and fruit withering, I at once applied what had appeared successful the year previous. I say 'appeared,' because other remedies had been used, and it was uncertain which was the real specific. The application was as follows:

I removed the earth about the roots near the body as deep as I could conveniently, making a tunnel around the tree, into which I poured 4 quarts of boiling water; as soon as the water had disappeared, I emptied a quart can of whale oil upon the body of the tree. The next day I syringed the whole tree with strong oil-soap water. Shortly after, I discovered a new bark forming under the black, dead bark outside, and now the tree is really a curiosity.

My impression is that the real specific is whale oil, but as I had used the boiling water in both experiments it should be mentioned as a concomitant, and it may be found essential to a cure. The tree upon which I tried the same remedy last year was not as much diseased, and having cut off the black part, I had no opportunity to discover the effect upon the diseased limbs. The tree revived at once, and has since evinced no symptoms of disease.

From the American Agriculturist.

Farming in Missouri.

When I first settled here, I imitated others. Sometimes this did well enough; at other times I found it was all wrong. I then began to make little innovations, such as plowing as deep as my team could pull the plow—provided I had what I supposed to be a sufficiency of soil—hauling out all the rubbish I could collect about my stable and cowyard, plowing in my wheat, after having given my ground from one to three plowings and harrowings before seeding, breaking up corn land twice before planting, &c. Now, will you believe it? I have been, and am still, laughed at for all this. But I could not make good crops without it. The truth is, to make a good crop of anything, I have to work. Since reading your paper, resources have presented themselves, of which I never should have thought. It is only three miles from my farm to town. The tanner will give me all his bark and leather shavings, the saddlers and shoemakers will give me their shavings, the proprietors of steam mills will give me their ashes, which contain a considerable quantity of charcoal; then there are livery and other stables, and many other resources, all of which I can resort to, free of charge. At home, I have an excellent limestone quarry, in the centre of my farm, which I have opened and worked considerably; and I last year spread a quantity of lime on one of my worn-out patches of ground. I have a pit walled, and always ready.

These, I find, from reading your paper, are all elements of fertility, if I only knew how to manage them. I shall begin my operations by turning in clover and buckwheat, and bring in the other helps as I learn how to do it. To all this, I may add, that you have pointed out modes of doing work on a farm, that I have never seen practised, but which, I feel confident, are better adapted to success, than those we follow here. Your management of meadow lands and wheat, is surely good.

The past was a bad season, in this section, for corn and wheat. I never performed such a season's work for corn, and I raised a tolerably fair crop, under the circumstances. One of our papers makes the following notice of it:—

“Large Corn.”—We have been shown some specimens of corn, which, for length and weight, considering that the ears were raised from a field that fails about four, out of every five seasons, surpasses anything of the kind we have yet seen. The corn comes from the farm of Mr. Oglesby, residing two or three miles from this city, and the following is the measurement:—The first 18 ears weighed 28 lbs. A single ear measured 10 1/2 inches in circumference; containing 28 rows, and 1,512 grains of corn. Twelve other ears measured 12 ft. 5 in. This, taken all together, excels any corn we have yet heard of; and we invite our farming friends to bring in their specimens and beat it! This is but another of the thousand instances of the fertility of the soil of this country, and its adaption to the growth of all kinds of produce.”

This corn was not raised on my farm, but on a field

which I rented, a mile and a half from home. It contained 20 acres of what is called here bottom prairie; a low, cold, wet, dead, sticky soil, adhering to the feet when a little wet, almost like tar. I had my own fun, though I worked hard. It was confidently and exultingly predicted, that though I could raise corn on my poor hills, by putting on them the labor I did, yet that pond would “bog” me. The season was extremely wet throughout. Many acres, in the same bottom, and on higher ground, were totally lost—drowned. Weeds and grass sprang up, and grew at an unprecedented rate, putting their enemies, (plows, horses, and drivers,) to flight. They gave it up, and surrendered.

URBANE B. OGLESBY.

Booneville, Mo., Dec. 17th, 1849.

The Kings of the Soil.

Black sin may nestle below a crest,
And sin beneath a crown;
As good hearts beat 'neath a fustian vest,
As under a silken gown.

Shall tales be told of the chiefs who sold
Their sinews to crush and kill;
And never a word be sung or heard
Of the men who reap and till?

I bow in thanks to the sturdy throng
Who greet the young morn with toil;
And the burden I give my earnest song
Shall be this—“The King of the Soil!”

Then sing for the kings who have no crown
But the blue sky o'er their head—
Never Sultan or Dey had such power as they,
To withhold or to offer bread.

Proud ships may hold both silver and gold,
The wealth of a distant strand;
But ships would rot and be valued not,
Were there none to till the land.

The wildest heath, and the wildest brake,
Are rich as the richest fleet,
For they gladden the wild birds when they wake,
And give them food to eat.

And with willing hand, and spade, and plow,
The gladdening hour shall come,
When that which is called the “waste land” now,
Shall ring with the “Harvest Home.”

Then sing for the kings who have no crown
But the blue sky over their head—
Never Sultan or Dey had such power as they,
To withhold or offer bread.

PROVING AN ALIBI.—A clergyman at Cambridge preached a sermon, which one of his auditors commended. ‘Yes,’ said a gentleman to whom it was mentioned, it was a good sermon, but he stole it. This was told to the preacher.—He resented it, and called on the gentlemen to retract what he had said. ‘I’m not,’ replied the aggressor, ‘very apt to retract my words, but in this instance, I said you had stolen the sermon, but I was wrong, for, on returning home, and referring to the book from whence I thought it as taken, I found it there.’

We cheerfully comply with a request made to us to publish the following article upon the subject of usury. We believe that the best interests of society demand that both money and labor should be left to find their own value in the market. To our mind it is just as absurd to say that money has at all times and under all circumstances the same value, as to assert the same thing of labor. And just as unreasonable to prohibit a man from paying an extra price for money to carry out an important enterprize, as it would be to prohibit him from paying extra wages to the men whom he employed to do his work.

We invite the friends of usury laws to communicate their views upon the subject.

The Usury Laws.

A petition is now in preparation at Boston to be laid before the Legislature, for the abolition of the Usury Laws in Massachusetts.

The subject is also before the Legislature of Pennsylvania, and the following bill has been introduced in the House of Representatives:—

By Mr. Matthias, "An act relating to the usury laws."

Sec. 1. Be it enacted, &c:—That from and after the passage of this act, it shall be lawful for all persons to pay and receive such rate of interest, for the loan of money on any promissory note, draft, acceptance, bills payable or bills of exchange, drawn for any time not exceeding twelve months, growing out of commercial or business transactions, or contracts therefore, as the parties may agree upon in writing.

Sec. 2. That no greater rate of interest than six per centum shall be charged on any judgement after the date of the rendition thereof, entered in any Courts of this Commonwealth, although such judgement may be founded upon a writing stipulating a higher rate of interest.

Sec. 3. That nothing in this act shall be construed to apply to any loan, where the sum or thing lent shall be construed to apply to any loan, where the sum or thing lent shall be assured by any grant, charge, or incumbrance of real estate, nor on any loan or discount by any bank or banking associations.

Sec. 4. That so much or any existing law or laws, as conflicts with the provisions of this act, be and the same is hereby repealed.

In the Banker's Magazine, for January, is an elaborate and forcible article upon the Usury Laws, from the pen of J. R. McCulloch, an English writer of celebrity, whose works have attained a large circulation in this country.

Mr. M. enters into a critical examination of the subject, to demonstrate that the rate of interest varies according to the security for the repayment of principal and the duration of the loan—that the Usury Laws do not protect the prodigal and unwary—that Usury Laws have been and are unknown in Holland, where the ordinary rates of interest are lower than in other countries in Europe—that Usury Laws do not reach the Government—and that the rate of interest is regulated by the

relation between the supply of capital and the power of employing it advantageously.

The following extract from Mr. McCulloch's article, is well worth the attention of the reader:—

It is most absurdly supposed, that, were the limiting the rate of interest repealed, every individual who has capital to lend would henceforth indulge in all those mean and disgraceful practices which at present characterize the lowest classes of money brokers. But it might just as reasonably be supposed that were country gentlemen allowed to sell game, they would immediately become addicted to all the vices of the poacher. The truth is, that if the rate of interest was left to be adjusted by the unrestricted competition of the parties, there would be almost no employment for the inferior class of money dealers. Except when the *market* rate of interest is below the *legal* rate, the usury laws prevent all persons, whose credit is not extremely good from obtaining loans from capitalists of the highest character, and force them to have recourse to those who are less scrupulous.

Supposing the market rate of interest to be six or seven per cent., an individual in ordinarily good credit might, were the usury laws abolished, easily obtain a loan at that rate. But the law having declared that no more than five per cent. shall be taken, and consequently having affixed a species of stigma to those lenders who bargain for a higher rate, necessarily excludes the rich and more respectable capitalists from the market, and obliges borrowers to resort to those of an inferior character, who, in addition to the premium for the risk incurred by entering into an illegal transaction, must receive an indemnification for the *odium*, which in such cases always attaches to the lender. It is idle and ridiculous to attempt to secure individuals against the risk of imposition in pecuniary, more than in any other species of transactions. But although the object were really desirable, it could not possibly be obtained by such inadequate means. The usury laws generate the very mischief they are intended to suppress. Far from diminishing, they most unquestionably multiply usurious transactions in a tenfold proportion, and powerfully aggravate all the evils they were designed either to mitigate or remove.

Nothing can be more unreasonable, or more entirely unfounded, than the clamor that has been set up against usurers, as money lenders are sometimes termed, because of their exacting a higher rate of interest than ordinary from prodigals and spendthrifts. This, surely, is the most proper and efficient check that can be put upon the thoughtless or unprincipled extravagance of such persons. Supposing the security of a prodigal and of an industrious man to be nearly equal, and this can scarcely ever be the case, does not the capitalist who would lend to the latter at a lower rate of interest than he would lend to the former, confer a real service on his country? Does he not prevent those funds which ought to be employed in supporting useful labor, and in adding to the real wealth of the nation, from being wasted in ridiculous extravagances or boisterous dissipation?—*Boston Daily Advertiser*, Jan. 17th, 1850.

FOR YOUTH.

From the Mothers' Assistant.
Saw Up and Saw Down.

CONCLUDED.

Although it does my heart good to recur to these teachings of my mother, yet I will not now linger upon this evening, when she first assembled us around the family altar, and dedicated us all to the Father of mercies. I remember how she named each name, and commended us to the restraining providence and the gracious love of our Lord and Savior. We seemed to feel that something new had happened to us, and that we were standing upon higher and more responsible ground than we had ever done before. And then, with what patience did she carry out her principles? "Ah," said Madison the other day, "it was sawing wood that made me." Now Madison's duty, one time consisted in sawing eleven sticks of wood every morning, which duty he thoroughly hated; not that sawing was so very bad, but working was; he would rather lounge upon the green. It was so very apt to be in his estimation either too warm, or too cold, or too pleasant to work, or too bad to work some way or other, unless indeed a troupe of boys were around to inspire him. The presence of Philip and James Giles was quite indispensable to a steady sawing, to help him, or admire him, or urge him on, some way or other. It happened one morning, that Philip had gone upon some errand, and Madison went forth to his morning's work alone. It was not long before he appeared before our mother, begging her to come and see how well he could work, but she could not come just then. He soon appeared again, complaining that the wood was too knotty—a third time he came, and it was too warm to work, "to warm by half;" a fourth, and his foot was lame, "dreadfully lame; and he must give his work that morning, he was certain." Upon this he flung himself with an air of satisfaction into a chair. Madison was fruitful in excuses. Our mother quietly arose, and taking Madison by the hand, led him back to the wood house. Pointing to the wood, she said, with that firmness that meant something— "There is your duty, my son, do it; one stick at a time, and it is done; it is only saw up and saw down, patiently and courageously. Now do it, or you are not fit to be a man." Madison well knew there was no gainsaying her, and that it must be done—beside, it was only "saw up and saw down," and what was there so formidable in all that? He began to consider, after all, it did not appear to be much, or very difficult work—and is it not so with all we have to do? By the bulk, our work may look both large and formidable, but if we patiently and courageously go at it, it is only the "saw up and saw down" which lessens, conquers and finishes, and we are surprised to find what simple business it is. Madison took up his saw and went to work; little by little, saw up and saw down, patiently, courageously; and it was done! Madison declares it was the hardest struggle he ever persevered in, but it was done! The pile disappeared before his own resoluteness.

"Yes, it was the first time I ever felt myself worth anything," he said, laughing—"Then I knew I was greater than a wood pile."

My mother neither praised or paid him when the work was done—she left him to the first conscious enjoyment of his ability to do, and it was plainly visible in the firm, independent step with which he entered the kitchen. But a cow would add to our stock of comforts, and a cow my mother was anxious of possessing. As for the boys, it formed the sure total of their wishes—the consummation most devoutly wished for. It was ascertained that Mr. Giles would sell one of his heifers. "But there is no other way than for us to earn her," said Phil, for the hundredth time, as we were talking over the matter one forenoon in the empty barn, "and earn

her we must. Where there is a will there is a way, mother says."

"Yes, I suppose so," said Madison, reluctantly; "but if somebody would only give us one"—he had ceased speaking of Mr. Madison Jones in that light, for Mr. Madison seldom came to see us.

"But we must not depend on people's giving us, or any such chance sort of ways, mother says. We must look to ourselves; that's the true way," said Philip.

"I suppose it is," slowly admitted poor Madison.

Behold three boys in Mr. Giles's mowing field—the smallest, a pale child sitting under an apple tree, with a little tin pail beside him, and watching with delight the movements of his two brothers, as they tossed about the new mown hay, and longed to be with them. Alas! his lesson was patient waiting. They worked as the sun rose higher and higher, and the last dew drop died on the grass.

"I am sick of it, that's a fact," at last said the tallest, as he tumbled upon a new mown swath.

"Up and be doing," said his companion; lets not flinch. We must go through with what we undertake, mother says," as he put his last rakeful on the cock.

"But I don't want to. I would rather never have a cow than work for it," he declared, lazily swinging his foot higher than his head.

"But any thing that is worth having, is worth working for, mother says," answered Philip; and you know what good things a cow will bring us!"

"Well, I don't care. Come lets eat our lunch," as he approached the tin pail under the apple tree. "Come, Phil, come!"

"No, not until I have done more; it is not eleven yet, not until the sun gets over the upper branch of the elm," said Phil, as he kept steadily on with his work. Meanwhile Madison peered in the pail, and, not only devoured his own part, but made ample encroachments upon his brother's. He then laid himself down upon the grass.

"Come, Madison, come! don't give up the first day—persevere, boy," cried Philip courageously—but no, it was too hot to work; and presently he fell asleep."

Alas! that this should be a specimen of the rest of the week. On Saturday night Mr. Giles paid off his workmen. Two men were sitting in the barn talking over the week's work—two men were leaning in their shirt sleeves, over the fence discussing the merits of Mr. Giles's cabbages; Philip, Madison and myself—for my brothers were always anxious and willing to have me along with them—with James Giles, were standing among the cows, patting one, pulling the ears of another, and admiring them all, especially the heifer we wanted to buy. Meanwhile Mr. Giles came out with his wallet, settled with the men, and laid out his plans for the next week. "Where are the boys?" he asked, not seeing us. Philip and Madison issued forth from behind the cows, somewhat hesitatingly, into the presence of their master. He was a tall, stern looking man, and not of gentle speech.

The boys were all afraid of him, especially of invading his peach and apple orchard, for he was always sure to find them out. Mr. Giles had wonderful ubiquity about his premises, and those who did well for him he was sure to befriend. He eyed the boys keenly. "Do you mean to go through the world as you have worked for me?" he asked, abruptly, nodding to Madison. And Madison looked down abashed. "And you," he continued, "You Philip, I know your name for I buried a little one by that name," upon which the strong man's voice grew tremulous. "If you go through the world as you have worked for me, you will be a man, a rich man, an influential man, and a good man, I hope; and that is, because you are willing to work for it." I looked out from behind a cow to hear the conversation. "And, depend upon it boys, as is the boy so is the man so is the man," continued Mr. Giles—"what you are a boy, you will be a man, Philip. I will give you two

shillings a day, and your brother shall have just four-pence a day; upon which he began to make the change. There was a solemn pause, broken at last by low sobs—Madison was crying through sheer mortification. I remember I wanted to come to the rescue, and getting up to poor Madison's side, I looked stoutly up into Mr. Giles's face and said, pulling Madison's sleeve: "He can saw wood, sir, he can saw!" How I got the courage I am at a loss to imagine. "Can he?" said Mr. G. pleasantly, turning the money in his hand, "I am very glad to hear that he is good for some thing." As he gave the wages into their hands, he said in a marked manner to Philip, "I shall be glad of your work next week, Philip," upon which he went back into the house leaving us standing, and for a time speechless. Philip and I looked at each other. "I won't have it. I won't have any of his money!" at length said Madison, flinging his quarter upon the ground. Philip quietly picked it up, and walked home. Nothing was said. Mother was waiting for us with our frugal meal. "And now I suppose you come with your first Saturday night's earnings," she said smiling at us through the window. Philip soberly laid in her lap, when he entered, the money, his own and Madison's. She looked at it, and asked how it thus happened. "It's too bad! I'll never work again!" said Madison, after we had given her all the explanation we could, his handkerchief still in communication with his eyes.

"And mother, I told Mr. Giles he could saw," said I as if an important extenuation had been added. There was no mistaking our mother's look, though she said nothing. She was grieved and anxious—neither pity, nor condolence, nor blame came from her lips.

On the next evening, Sabbath, as we all sat on a rude bench, Philip's handy-work, at the back side of the house, with the eastern sky for our picture, my mother recurred to the subject. Madison had been particularly meek and obliging all day, and his mind, now calm, was open to hear instruction. "My son," said she, taking his hand, and looking into his face, "do you not know that your industrious habits must be your main dependence in this world; that any character which is worth having, must be earned by effort? Do you not know that it is by patient, courageous working that any good is gotten?" She paused—"Madison, what you undertake, you must go through with, manfully. Will you lag and dally by the way, a burden to yourself and your friends?"

"I can saw," murmured he, looking pitifully down, "I like to saw!"

"And do you know why?" she asked earnestly; it is because you have mastered the saw; and you have conquered a wood pile; and so conquer all difficulties—work at them until they disappear before you—then you will know how great is your power to do, then you will love to do."

"I can't rake—I don't like to," muttered Madison. "Can't?" said she, with spirit—"will my son be conquered by a rake? What the saw could not do, shall the rake do?"

"No, mother," he answered, with a decision uncommon to him, as he caught her spirit; then he added looking down, "but I don't want to rake with Mr. Giles's rake."

"Then we shall never get our heifer, for nobody will have Madison now Mr. Giles turns him away," said Philip, dolorously, as his heifer prospects seemed darkened.

"Not have the heifer!" echoed I, ready to cry. Here was a long pause—Madison looked as if he felt good for nothing, as if he would give all the world to get out of this responsible corner. Heifer or no heifer, was the question, and it seemed to depend on him, and still more upon his work. He looked around for relief, but in the faces of neither mother or brother, did relief appear. His mother had not the money to advance, and Philip was doing all he could.

"Make up your mind to go back and ask Mr. Giles to let you try again," said our mother—"and then, Madison, take hold, with a stout heart, of what is before you, and do it—do it and never flinch?" and then she told us how every thing truly valuable was to be earned by struggling and effort, and long striving, which alone could open heaven to us.

In the morning, Madison appeared with a sorry air. He was undecided, and therefore unhappy. How many inefficient boys of elder growth can sympathize with him! Coveting the fruit of industry, yet incapable and unwilling to put shoulder to shoulder, and hand to hand in the great battle of life.

At an early hour he went to his saw. Little by little, one stick at a time, he finished the wood necessary for the day. I have done this," said he to himself; "I have done it, it is only to saw up and saw down,—what we want is to come to the point and then act mother says." He stopped and surveyed his position—the heifer, Philip, his mother, and last, though not least his reputation. "I must," he declared, stamping his foot firmly on a stick. "I must make up my mind mother says, and then do it." Upon this, he turned and walked into the house.

"Mother, I will go to Mr. Giles's," he said entering the kitchen, and planting himself before her at full height, the stoop in his back actually disappearing. She looked at him, and her countenance expressed all he could wish. I do not know what passed between him and Mr. Giles, but Madison came home that night in the highest spirits. "Mother," he exclaimed, "I should like to be a farmer. I like farming first rate." It was easy enough to see that his hands went with his will, and they both went right. He felt the genuine joy of conquering himself, and achieving a work. Madison has since said, that when well nigh giving up, or when he began to lag by the way, he cried out to his flagging energies, "Do it! do it! a stout heart mother says. If I can saw, I can rake—and after all, it is only saw up and saw down. I must help myself or nobody will," and away flew his rake over the field.

It was the third year of our residence in the one story house, on a fine September afternoon, that Bossy entered the yard. Philip behind her, Madison by her side, now and then patting her affectionately—mother and I were in the barn door awaiting her arrival.

"It is ours, our cow!" I exclaimed in ecstasy. "Is she not a beauty, mother?" exclaimed Madison, driving her so as to display her broad side to the best advantage. "One of the best heifers that Mr. Giles had, he says. O mother, where's the new pail? I learned all about milking over to Mr. Giles's. See her bag, is it not a beauty, mother?" As Philip threw back his hat, showing his sun burnt features lighted up with interest, he looked the impersonation of bright, elastic, healthy boyhood.

Need I say that never was milk sweeter, nicer richer, whiter than was that. Need I say that never cow existed like Bossy, never one so fat, so amiable, so excellent. Never was cow like that cow—and why? Because we had earned her. She was the product of our toil, resolute, unflinching toil. In her my brothers tasted the sweets of achievement, as well as sweet milk. From that time Madison never grumbled. A change had been gradually wrought in his character. He understood what a power he possessed of doing, and he flung off his lounging, indolent, complaining habits. Ah, our mother understood a great secret, the importance of giving boys something to do, and making them work it out resolutely to the end. The activities of boyhood need to be disciplined and directed. Boys weary of continual play, yearn for something to accomplish. Give it to them, and then compel steady, persevering effort until it is finished. In the end they are better boys and happier boys for it. It is the only preparatory training to fit them for success in business, and for steady, well directed effort in mature life. And

this is one reason why the country possesses advantages over the city in the training of boys. In the country there is something for them to do, and space to do it in. In teaching children to become useful, parents need much forbearance and great resolution. Their awkward, bungling, or reluctant attempts are discouraging and vexatious, and a father will often angrily send off his boy and do the thing himself, in far less time and far better style, rather than take the trouble to teach and encourage the son to execute it. It was not so with our mother. In the garden, the barn and the wood house, her looks and words of encouragement everywhere presided. She gradually accustomed us to active duty, assigning to each of us some work to do, and following us up until it was done, and well done, and well done. She inspired us with energy and cheerfulness, and bade us witness the good results flowing from industrious habits. Ah, it is our mother who made us what we are. And now we have turned from this dear home of our boyhood, no longer the dingy, low, one-story house, but a commodious dwelling of two stories, with ample portico in front, and the cool shadows of honeysuckle acaia inviting you to linger there. It belongs to Philip, the indefatigable fruit-grower. Look into his nurseries and garden; they are young yet, but is it not enough to delight one's eyes, to say nothing of the taste? They are the work of his own hands. His vicinity to the city affords him an extensive market, and he has already exceeded our most sanguine expectations. Look at his house, and young shrubbery growing so luxuriantly in every direction. There is a little bed room in that house, which is a more interesting object still. It is nearly on the site of the old-bed room. It commands a beautiful view of the garden and the western sky, and of a distant pasture where Bossy's descendants are quietly grazing, and there, at the window sits our mother, our beloved mother, in a rocking chair. She is old and infirm now—but though her eyes are dim, her heart waxes not old. It is full of love and gratitude, and she blesses God for her boys. "Such boys!" she says. And who under God, has made us what we are? O, mother! mother! Philip still seeks her direction and advice about every thing concerning him; and his Mary regards her with reverential love—while in Jane—Jenny we pet her—she seems to perpetuate her youth. Her last days seem her best days. How do Madison and I rejoice to leave the dry, dusty city for a Sabbath at Philip's. The Sabbath is truly a Sabbath there, so peace speaking and full of love.

Madison holds an important post in the extensive firm of "Giles & Co." the senior partner is a younger brother of Mr. Giles, the farmer, Madison's firstmaster who now gives him as warm a welcome as anyone in the village. "Do you not remember the morning that you came back to work? But, thank your mother for that," said the old gentleman chuckling, and shaking Madison's hand, with a right hearty shake. Yes, Madison earned the character which Mr. Giles gave of him to his city brother. Behold what it has gained for him

It is Monday morning, and we have just returned to town, I never enter the city and my office, after leaving Philip's without feeling myself a better man—a more tranquil, sober, home-loving, God-fearing man—and, shall I add it, a greater shrinking from the toils and perplexities of city life. But "never flinch," sounds in my ear—"Take hold with a stout heart, my son, of whatever lies before you" and the well remembered accents of my mother's voice prompt me to duty.

But sad news awaits me. Cousin Madison Jones is dead. He died poor, and a broken hearted, disconsolate old man. His sons have ruined him. Ungoverned, idle and dissolute, they have brought his grey hairs in sorrow to the grave. The last time I saw him, it was my happiness to befriend him. "Thank ye! thank ye!" he exclaimed kindly and gratefully. I could not realize that it was the proud, rich man who was the terror of my boyhood. You are a dear boy, a dear boy! I see your

mother had the right of it—Jane was right—she taught you not to be afraid of work. The big yard and barn wasn't for nothing; if I could live my life over again!" upon which he drew a deep sigh, and rose to go.

Poor Cousin Madison! Ah, yes! I could say to all the Madisons, that we were all early indoctrinated, patiently, courageously, to *saw up and saw down*; that was the secret of my mother's management, and of overcoming the thousand obstacles to advancement and success, which young men without property or influential friends must necessarily meet with in the great world of business; and if necessary for the business of the outward, much more for the inward life, in this patient, courageous, pains-taking course? Does it not constitute that striving which the Saviour speaks of, by which we can alone secure peace, purity, God's blessing and heaven at last?

So ends the brief record of my friend's life.

Drowne's Wooden Image.

BY NATHANIEL HAWTHORN.

One sunshiny morning, in the good old times of the town of Boston, a young carver in wood by the name of Drowne, stood contemplating a large oaken log, which it was his purpose to convert into the figure-head of a vessel. And while he discussed within his own mind what sort of shape or similitude it were well to bestow upon this excellent piece of timber, there came into Drowne's workshop a certain Captain Hunnewell, owner and commander of the good brig called the *Cynosure*, which had just returned from her first voyage to Faya!

"Ah, that will do, Drowne, that will do!" cried the jolly Captain, tapping the log with his rattan. "I bespeak this very piece of oak for the figure-head of the *Cynosure*. She has shown herself the sweetest craft that ever floated, and I mean to decorate her prow with the handsomest image that the skill of man can cut of timber. And, Drowne, you are the fellow to execute it."

"You give me more credit than I deserve, Captain Hunnewell," said the carver, modestly, yet as one conscious of eminence in his art. "But, for the sake of the good brig, I stand ready to do my best. And which of these designs do you prefer? Here," pointing to a staring, half length figure, in a white wig and scarlet coat. "Here is an excellent model, the likeness of our gracious king. Here is the valiant Admiral Vernon. Or, if you prefer a female figure, what say you to Britannia with the trident?"

"All very fine, Drowne; all very fine," answered the mariner. "But as nothing like the brig ever swam the ocean, so I am determined she shall have such a figure-head as old Neptune never saw in his life. And what is more, as there is a secret in the matter, you must pledge your credit not to betray it."

"Certainly, said Drowne, marvelling however, what possible mystery there could be to an affair so open, of necessity, to the inspection of all the world, as the figure-head of a vessel. "You may depend, captain, on my being as secret as the nature of the case will permit."

Captain Hunnewell then took Drowne by the button and communicated his wishes in so low a tone, that it would be unmannerly to repeat what was evidently intended for the carver's private ear. We shall, therefore, take opportunity to give the reader a few desirable particulars about Drowne himself.

He was the first American who is known to have attempted—in a humble line it is true—that art in which we can now reckon so many names already distinguished, or rising to distinction. From his earliest boyhood he had exhibited a knack—for it would be too proud a word to call it genius—a knack, therefore, for the imitation of the human figure, in whatever material came most readily to hand. The snows of a New

England winter had often supplied him with a species of marble as dazzling white, at least, as the Parian or Carrara, and it less durable, yet sufficiently to correspond with any claims to permanent existence possessed by the boy's frozen statues. Yet they won admiration from maturer judges than his school-follows, and were, indeed, remarkably clever, though destitute of the native warmth that might have made the snow melt beneath his hand. As he advanced in life, the young man adopted pine and oak as eligible materials for the display of his skill, which now began to bring him a return of solid silver, as well as the empty praise that had been an apt reward for his productions of evanescent snow. He became noted for carving ornamental-pump-heads, and wooden urns for gate posts, and decorations more grotesque than fanciful for mantel pieces. No apothecary would have deemed himself in the way of obtaining custom, without setting up a gilded mortar if not a head of Galen or Hippocrates, from the skillful hand of Drowne. But the great scope of his business lay in the manufacture of figure-heads for vessels.—Whether it were the monarch himself, or some famous British admiral or general, or the governor of the province, or perchance the favorite daughter of the ship owner, there the image stood above the prow, decked out in gorgeous colors, magnificently gilded, and startling the whole world out of countenance, as it from an innate consciousness of its own superiority. These specimens of native sculpture had crossed the sea in all directions, and been not ignobly noticed among the crowded shipping of the Thames, and wherever else the hardy mariners of New England had pushed their adventures. It must be confessed, that a family likeness pervaded these respectable progeny of Drowne's skill; that the benign countenance of the king resembled those of his subjects, and that Miss Peggy Hobart the merchant's daughter, bore a remarkable similitude to Britannia, Victory, and other ladies of the allegoric sisterhood; and, finally, that they all had a kind of wooden aspect, which proved an intimate relationship with the unshaped blocks of timber in the carver's workshop. But, at least, there was no inconsiderable skill of hand, nor a deficiency of any attribute to render them really works of art, except the deep quality, be it of soul or intellect, which bestows life upon the lifeless, and warmth upon the cold, and which, had it been present, would have made Drowne's wooden image instinct with spirit.

The captain of the *Cynosure* had now finished his instructions.

"And, Drowne," said he, impressively, "you must lay aside all other business, and set about this forthwith. And as to the price, only do the job in first rate style, and you shall settle that point yourself."

"Very well, captain," answered the carver, who looked grave and somewhat perplexed, yet had a sort of smile upon his visage. "Depend upon it, I'll do my utmost to satisfy you."

From that moment, the men of taste about Long-wharf and the Town Dock, who were wont to show their love for the arts by frequent visits to Drowne's workshop, and admiration of his wooden images, began to be sensible of a mystery in the carver's conduct. Often he was absent in the day-time. Sometimes, as might be judged by gleams of light from the shop windows, he was at work until a late hour of the evening; although neither knock nor voice, on such occasions, could gain admittance for a visitor or elicit any word of response. Nothing remarkable, however, was observed in the shop at those hours when it was thrown open. A fine piece of timber, indeed, which Drowne was known to have reserved for some work of especial dignity, was seen to be gradually assuming shape.—What shape it was designed ultimately to take, was a problem to his friends, and a point on which the carver himself preserved a rigid silence. But day afte-

day, though Drowne was seldom noticed in the act of working upon it, this rude form began to be developed, until it began to be evident to all observers, that a female figure was growing into mimic life. At each new visit they beheld a larger pile of wooden chips, and a nearer approximation to something beautiful. It seemed as if the hamadryad of the oak had sheltered herself from the unimaginative world within the heart of her native tree, and that it was only necessary to remove the strange shapelessness that had encrusted her, and reveal the grace and loveliness of a divinity. Imperfect as the design, the attitude, the costume, and especially the face of the image still remained, there was already an effect that drew the eye from the wooden cleverness of Drowne's earlier productions, and fixed it upon the tantalizing mystery of this new project.

Copley, the celebrated painter, then a young man, and a resident of Boston, came one day to visit Drowne; for he had recognized so much of moderate ability in the carver, as to induce him, in the dearth of any professional sympathy, to cultivate his acquaintance. On entering the shop, the artist glanced at the inflexible image of king, commander, dame and allegory that stood around; on the best of which might have been bestowed the questionable praise, that it looked as if a living man had been changed to wood, and that not only the physical, but the spiritual and intellectual part, partook of the stolid transformation. But in not a single instance did it seem as if the wood were imbibing the ethereal essence of humanity. What a wide distinction is here, and how far would the slightest portion of the latter merit have outvalued the utmost degree of the former!

"My friend, Drowne," said Copley, smiling to himself, but alluding to the mechanical and wooden cleverness that so invariably distinguished the images, "you are really a remarkable person! I have seldom met with a man, in your line of business, that could do so much, for one other touch might make this figure of General Wolfe, for instance, a breathing and intelligent human creature."

"You would have me think that you are praising me highly, Mr. Copley," answered Drowne, turning his back upon Wolfe's image in apparent disgust.—"But there has come a light into my mind. I know, what you know as well, that the one touch which you speak of as deficient, is the only one that would be truly valuable, and that, without it, these works of mine are no better than worthless abortions. There is the same difference between them and the works of an inspired artist, as between a signpost daub and one of your best pictures."

"This is strange," cried Copley, looking him in the face, which now, as the painter fancied, had a singular depth of intelligence, though hitherto, it had not given him greatly the advantage over his own family of wooden images. "What has come over you? How is it that, possessing the idea which you have now uttered, you should produce only such works as these?"

The carver smiled, but made no reply. Copley turned again to the image, conceiving that the sense of deficiency, so rare in a merely mechanical character, must surely imply a genius, the tokens of which had been overlooked. But no; there was not a trace of it. He was about to withdraw, when his eyes fell upon a half-dovetailed figure which lay in the corner of the workshop, surrounded by scattered chips of oak. It arrested him at once.

"What is here? Who has done this?" he broke out after contemplating in speechless astonishment for an instant. "Here is the divine, the-life giving touch!—What inspired hand is beckoning this wood to arise and live? Who's work is this?"

"No man's work" replied Drowne, "The figure lies within that block of oak, and it is my business to find it."

(Concluded in our next.)

A GARDEN.—Too much has been said and sung about the advantages and pleasures—the utility and delights—of a Garden, to require that we should expatiate at length upon this theme in order to commend it to any of our readers. Unfortunately many persons—in “populous cities pent”—have very little spare room for a garden. But there are some whose residences are in the suburbs who may have at least a “wee spot,” which they can devote to flowers and shrubbery—with perhaps room for a few choice fruit trees, if not for vegetables. For those who are far enough removed from the city to command an acre of ground—and we presume that, with improving roads, the number of these will rapidly increase near our city—a few general directions may be of service—though Fessenden’s American and Loudon’s English Gardener should be in the hands of all who wish a garden, either for use or ornament.

Suppose the garden to cover the space of an acre. Next to the fence, on all sides, have a border, six or eight feet wide, on which to grow small fruits, such as strawberries, raspberries, gooseberries, currants, &c.; also grapes, and other large fruit, as quinces, is desired together with such vegetables as rhubarb, asparagus, and other young plants, herbs, &c. Next to this border have a pathway entirely round; 4 or 5 feet wide; thus leaving the central portion of the ground in two large divisions, or lands free from obstructions, so that it can be readily plowed.—One of these divisions should be early plowed—say in March or April—for early crops; and the other about a month later, for such as require late planting. When the ground is plowed and harrowed smooth, a cross path or two can be made. These need not be made with as much care as the others, insomuch as they will be plowed up every year.

The central path should be seven or eight feet wide, so as to allow room for a waggon to pass along it, and the gateway the same width. If gravel can be readily obtained, it will be a great saving of expense, and addition to comfort, to make this central path of gravel. Some use brick on each side of this pathway, and also along the end or side fence. Nearest the house should be flowering plants and shrubs, with occasional fruit trees or grape vines, as persons see proper. These will not interfere with the plow, nor occupy much space.

CULTIVATION OF THE CAULIFLOWER.—The seeds are sown in the beginning of April, in a box, and placed in the kitchen window, and attended to as ordinary cabbage seed. As soon as the plants were large enough to bear transplanting, they were placed at the distance of three feet each way and “tended” as cabbages in all respects until the head attained the size of a cabbage before heading. On the examination of the stock there seemed to be no tendency to flower, and I had every one loosened by putting a spade, about six inches from the stock and inserting it sufficiently deep, so as to loosen the plant without displacing it; this left some of the lateral roots unhurt, so that the main one being suspended, there was enough left to prevent the plant from dying. I repeated this operation, once in August, once

in September, and once in October, still the tendency was to form the outer leaves in great exuberance; then is the critical time. In the latter part of October, I commenced to break a few of the leaves and turn them over, and down upon the embryo flower; pursuing this with less caution, the ailment necessary to supply the great growth of leaves is converged to the flower and the leaves by turning them upon it; seclude the light, and the flower is more compact, better bleached, and less liable to “run to seed.” The portion of the leaf to be broken is about the middle of the large vein, and you should begin to break the third or fourth leaf from the bud. The manner of securing the cauliflower for winter use is very simple—merely transplanting in a dry cellar and retaining as much earth as possible attached to the roots, adding some more, so as to preserve the roots from decay. Those intended for winter use, do not require to be loosened, as they should be planted later.—*Am. Farmer.*

From the Cincinnati Commercial.

Care and Management of Ornamental Flowering Plants for February.

To those who have embarked in the interesting business of cultivating ornamental flowering plants, either for the purpose of ministering to their pleasure, or for the substantial one of making money, will perceive that the month of February requires more practical skill, and more assiduous care, and unremitting attention to be bestowed upon their plants than any other month in the whole revolution of the seasons, from the fact that in anticipation of the approximating Spring many plants are apt to exhibit symptoms of premature vegetation, especially if there should be several consecutive warm and pleasant days; should they start into growth so as to give evident demonstration that vegetation has decidedly commenced, you must keep up and sustain their growth by artificial heat, if the natural becomes so much changed as to stop, or materially retard their growth, which will likely to be the case. Should the Thermometer fall below about 40 degrees, the temperature of your plants may be kept up by means of a small fire made upon your hearth, or it may be more beneficially done by admitting the warm air from an adjacent room by throwing open the door between the room in which the plants are kept and the one in which you have fire, the latter method of warming is much better than making a fire in the same room in which the plants are situated, and if at all practicable should be done.

Should you neglect the necessary care in this particular, you will incur a great risk of entirely losing the bloom of your plants for the ensuing season.

It is very essential that the growers of plants should make themselves acquainted with the proper time at which different families of plants should start into growth, as by means of that sort of information that an determine much more correctly of the method of treatment best suited to their growth and prosperity.

Those having the management of plants can usually determine with a great deal of precision at what season of the year the various kinds of plants dependent up-

on their care, naturally start into vegetation. There are but few, if any plants which do not exhibit some indication of their starting into growth about the proper time at which the aiding hand of the cultivator should be brought into requisition.

Plants which either through summer or winter have been watered sparingly, should, as soon as they exhibit any indications of growth, be potted, or if already in pots, they should be repotted, and still watered sparingly, until they are known to be vegetating freely, when they will require to be watered very abundantly in order to sustain their growth, and maintain their healthy condition.

Azalia Indica. Towards the last of this month this most magnificent, and almost unrivalled ornamental flowering shrub will begin to develop, and unfold its splendid and richly variegated flowers; and during the time it is in bloom its roots should be supplied with an abundance of water. Parlors and Green-houses where elegance and beauty are aimed, should not be found destitute of *Azalia Indica*. Its management is so easy and the profusion of its flowers so great, that none will I think long be without it.

Watering Plants. The directions given last month for watering may safely pursued this, taking care to give to such plants as are growing or beginning to grow more water than is necessary to be given to such as are in the state of suspension of growth, or are entirely dormant.

Roses, or daily roses particularly, if they have been the inmates of your parlor during the winter, will about this time begin to expand the bud and flowers, and as they are often assailed by a species of green fly, whose attack is very prejudicial to them, you should be vigilant in your efforts to destroy them as soon as they make their appearance.

Hyacinths, and other bulbous-rooted plants will require some attention; such as are in glasses should be supplied with the necessary quantity of water and be kept in such a position as to receive a great quantity of light. Bulbous-roots during the time they are growing, should not be permitted to be shaded by any other plants, as it would render them imbecile and unhealthy.

Hyacinths, and bulbs, require to be tied up to sustain their weight, which should be done by placing a small stick in the vicinity of the plant, in an erect position, and fastening the plants to the same, by means of a small string tied around the stem and then attached to a stick being careful not to tie the string too tightly around the stem, but allowing sufficient room for the stem to expand and grow.

Camellias will now, and through the entire month, continue to present a most elegant and splendid display of beauty. Those that have had that treatment extended to them, which I have in my humble efforts to impart impart information to the young amateur heretofore endeavored to give, when writing upon the subject of Floriculture, will now be in full bloom, and if kept in a temperature varying from 40 to 50 degrees, will continue to do so for from four to six weeks, and if they are entirely healthy, and judiciously managed will be more like-

ly to continue to bloom till April, affording to the admirers of beautiful flowers a rich optical feast, contrasting with the general aspect of our outdoor flowers so strikingly as to fill the beholder with profound admiration for that art and care which has enabled him to preserve a collection of live flowers, despite the rigor of Old Winter.

Geraniums that have been kept in small pots in accordance with my directions given last Autumn, should now be shifted into pots two sizes larger, give them the same compost as previously directed, with this slight difference that a little more manure should be added to it, to increase its fertilizing influence; the geranium will now begin to grow, and must be watered freely, give them plenty room, and as much light and sun as practicable until they commence blooming, when less sunshine should be allowed to fall on them. In conclusion I will take the liberty to remark to such of my amateur friends as have pursued the course I have prescribed for the management of plants, that they may in a short time be relieved to some extent of the great and unremitting attention to them, which the winter season has impelled them to bestow, as the return of spring which ere long must inevitably lend its invigorating influence to reanimate and bring into healthy and vigorous life and growth, those plants which have been kept alive by the hand of the cultivator, which has been so freely extended to them during the dreary winter.

THOMASSHEREN.
Jackson Street, Cincinnati.

MACHINE FOR DRESSING STONE.—We saw tested on Saturday last, a machine for dressing stone, invented by our worthy townsmen, Capt. Robert Eastman; the entire success of its operations adding greatly to the already well-known reputation of its author. The machine has a rotary motion and by means of burs or cutters, gives some millions of blows in a minute. These cutters are so constructed that they can be replenished at a cost of one and a half or two cents each—being the simple expense of renewing a stonecutter's chisel. We saw it dress a piece of common grindstone, cutting it about one inch in depth, and leaving a square edge and beautiful surface, as smooth as it cut by a chisel. A very important point is, that it will flute a column in marble, or prepare mouldings in any desirable form, with great beauty and expedition; doing its work as perfectly as is now done in the ordinary way. Jason Smith of Troy, N. Y., has taken the agency for the United States, to whom all communications regarding it may be addressed.—*N. H. Patriot.*

THE NEXT PATENT OFFICE REPORT.—The Commissioner of Patents has employed Dr. Daniel Lee to aid him in the preparation of the Patent Office Report, assigning to him the Agricultural Department of that Office. Dr. Lee has edited the *Genesee Farmer*, and *Southern Cultivator*, with distinguished ability, and we are pleased to learn that so able assistance is employed in a document that may be made the medium of diffusing a large amount of highly valuable matter, but which has often been burdened with selections without taste or judgment.—*N. E. Farmer.*

HORTI CULTURE.

St. Louis Horticultural Society.

The regular monthly meeting of this Society was held on Saturday, Feb. 2, THOS. ALLEN, Esq., President, in the chair.

Mr. WM. M. PLANT presented to the Society specimens of the following seeds: C. F. & Co.'s Premium Flat Dutch Cabbage; Waites' King of the do; Portugal do; Walcheren Cauliflower; Turkey or Prussian White Solid Cellery; Early Russian Cucumber; Large Curled India Lettuce; Versailles Lettuce; Early Red Onion; New Danvers Yellow do; Large Hamburg Parsley; Prince Albert Peas; Flack's Dwarf Victory do; Woods' Early Frame Radish; Flanders Spinage; Skirving's Liverpool Turnip; Dale's High Bred do:—Which seeds were, on motion, presented to the President, with a request that he should cultivate them and report the result to the Society.

The President presented Apples of the following varieties: Yellow Bellflower; Rambo; Genitent; Esopus Spitzenberg.

Mr. JAS. PAGE presented fine specimens of lettuce, grown under glass.

The Council submitted a partial report, recommending May 1st for the Spring Exhibition, and September 18 and 19 for the Fall exhibition.

On motion,

Voted, That the report be referred back to the Council, with instructions to report at the next monthly meeting.

The Committee on Accounts reported that they have certified accounts in favor of the following printing establishments, which accounts have been countersigned by the President: St. Louis Union; New Era; Organ; Reveille; and Anzieger des Westens.

Voted, That hereafter the Secretary address a notice to each member, notifying him of the meetings of the Society.

Voted that the Treasurer be requested to prepare a new and correct list of the members of the Society.

The President then announced the following Standing Committees:

On Fruits.—Messrs. Lewis Bissell, James Sigerson, James Glasgow, N. Reihl, E. Abbott, R. C. Clark.

On Flowers.—W. Salisbury, R. Knox, F. E. Robinson, H. W. Gemp.

On Vegetables.—James Turner, James Page, B. Martin, Julius Mincke.

On Ornamental Trees.—W. M. Plant, Wm. Milburn, C. P. Chouteau.

On Indiginous Trees.—N. Reihl, John Thomas, W. M. Plant.

On the Library.—H. W. Gemp, James E. Yeatman, F. E. Robinson, E. Haren.

The President communicated some information respecting a new Chinese vegetable which he cultivated last season, called *Hoo Sung*. He had found it a delicious vegetable, easily raised, and so healthy that they had eaten of it freely, during the prevalence of the cholera, without experiencing any bad effects from its use. Adjourned. E. ABBOTT, Secretary.

WARTS ON PLUM AND CHERRY TREES.—We hear repeated complaints of the injury done to those valuable fruits by an insect, which by perforating the bark on the branches, in order to find a lodgement or nidus for their future progeny, occasions an intumescence or protuberance to arise over the puncture, and which, if not removed, will finally destroy the tree.

In many sections where the above named fruits were formerly very abundant, their cultivation, in consequence of the almost universal prevalence of this evil, has near or quite ceased. The numerous species of the red cherry are, perhaps, more frequently destroyed by the depredations of this insect, than the plum; yet we have seen entire plantations of the latter utterly killed out by it, and have been told by many that the evil was "past cure," and admitted of no remedy. This, we are persuaded, is an error. In several instances which have fallen under our observation, trees have been resuscitated after the limbs had become extensively affected. Whenever a swelling is noticed, it should be immediately cut out, taking as much of the 'cambium' or sap wood, as may be necessary to remove the cause of the intumescence. No matter if it does require a deep cut; do not flinch, but cut with it, and consign the removed part to the fire, as it contains the eggs or their products, of the insects which is the cause of the disease, and which if permitted to thrive, will assuredly perpetuate the evil, by pursuing when capable of so doing, the same insidious and destructive course as did their parents the year before. After cutting out the swelling, which should be done with a sharp blade, the wounds ought to be carefully covered with some adhesive substance, in order to protect them from the injurious effects of the atmosphere. For this purpose, we are aware of no article more likely to effect the desired object than the concute used by orchardists, "grafting wax." This wax is utterly impervious to the weather, sufficiently adhesive to remain firm under the most trying circumstances, and so cheap that no reasonable objection can be urged against it on the score of expense. If every one who cultivates fruit trees would but adopt this simple method of prevention and cure, there would soon be an end of the evil complained of; but so long as the majority of fruit raisers in a locality, neglect it, the remainder may as well do so, for the flies produced in one tree during a single season, are generally sufficient to injure or destroy a thousand.

The Public Lands.

ERRORS OF LEGISLATION—RIGHTS OF LABOR.

Mr. Morse, one of the representatives in Congress from this State, has introduced a bill "to discourage speculation in the public lands, and to secure homes thereon to actual settlers and cultivators." It is a most laudable movement, and we trust will, with its collaterals, the graduation and reduction of the price of the public lands, be accomplished. There is no state more deeply interested in these measures than Louisiana. There are millions of acres that will never be sold by the United States, and therefore yield no revenue to the State, unless the minimum be reduced. It

has been urged against this reduction that it would throw the whole country into the hands of speculators, but that could be prevented by limiting the amount that each individual should be permitted to enter, and by other stringent provisions. The existing pre-emption law is not sufficiently liberal to the settler on the public lands, and does not shield him effectually from the power of the speculator. The general government has constantly held out inducements to settle on the public lands, and the claim of the settler has the strongest equities to support it. It is perfidy, if not fraud, to consider the settlers as trespassers, to expel them by law, or to allow capitalists, under any regulation of law, to deprive them of their homes. Every citizen has a claim on his government for support, and equitable ownership in the public domain. If we give them an inchoate title by allowing them to take possession; if, after having cut down the forest, opened roads, bridges and improved water courses; erected school houses and churches, thereby giving value to the adjacent lands, the United States ejects them, or permits the capitalist to eject them, houseless wanderers over a soil created for their benefit and ameliorated by their industry, the world would denounce it as a policy heartless and unjust. There is a new and strong feeling growing up in relation to the public lands. The old doctrine that they should be retained as a source of national revenue, is dying away. A large national revenue is a national curse. The happiest and most powerful nation is that whose treasury is poorest, and whose wealth is in the hands of its citizens. The proper principle is to place the soil within the reach of every man, at rates barely sufficient to cover the costs of survey and sale, and to grant to every one a pre-emption to acquire by his labor the means of paying for the soil he cultivates. Our legislation, national and state, is too partial and discriminating. The statute books teem with acts operating to the benefit of society at the expense of another; favoring individuals by special acts; endowing universities where a poor boy can never enter, nurseries of exclusive and anti-republican; ideas conferring extravagant salaries on men who manage millions better than offices; burdening the country with regiments of office-holders with extravagant fees. When the people see all this what is the consequence? A feeling of general discontent. In despotic governments the disaffection of the people is, comparatively, unimportant; it can be put down with edicts and censorships and arms. But here the multitude are free. No chains are worn, nor badges of servitude. There are equal privileges, fundamental rights and equitable claims that may not be violated. Public opinion, if it has not the sanctity and legality, has more than the power of law or government. It cannot be put down by any act of the legislature or of congress; but those bopies can force upon the people a feeling of discontent, a jealousy of property, a hostility to chartered rights. There is a tendency to this in all mankind.—Without venturing into political economy, society may be divided into two classes, producers and non-produc-

ers. The first constitute the majority, but three-fourths of their labor are taken by legislation, in the shape of taxes and tariffs, to enrich the latter. The few become rich. The many remain poor, under the contributions exacted by the former who, in all ages of the world, have contrived to hold the law-making power in their hands. The strength, the bone and muscle of nations is in the masses, and when roused by a long denial of justice, or by oppressive legislation, their retribution is terrible. History is crimsoned with the story of popular revenge. Trace the source of every revolution, from the earliest records of vice and folly, and it will be found that, however aggravated or postponed by other causes, they always originated in some unregarded disaffection of the people. There is such a thing as an agrarian spirit. It is spreading throughout Europe, and every one may perceive its progress in the United States under the name of **FREE SOIL**. For the last fifteen years, fostered by unequal laws, high tariffs, and the facilities given by law to capitalists to monopolise the soil, it has spread widely and deeply, particularly in large cities and manufacturing communities, where the distinctions of society and the contrasts of plenty and privation are painfully visible. This is, certainly, the weak point in our system. It is not foreign aggression, or extended empire, or centralism, we have to dread, but this community principle, this growing hostility to vested interests, this disposition to stretch legitimate rights and principles into ultraism. In a democracy, this feeling will always be produced by partial legislation, and it can only be arrested by conferring equal benefits on all. It is unwise to sport with the affections of the people. What can compensate a government for such a loss? What is an overflowing treasury when filtered from the tears of the wretched, and wrung from the hard-earnings of labor? From those who would coin their blood from the country, and rampart it with their dead bodies, before it should be polluted by the presence of an enemy. If we desire to perpetuate this devotion, to restrain the fatal tendency to which we have alluded, to secure the permanent enjoyment of vested interests, every man who seeks it should have a portion of the soil. There is little faith in parchments or charters, or in the rights they affect to guarantee, but our republic would endure for centuries, if every fifty acres of the public domain was the *bona fide* property of the actual cultivator. Incorporate every man with the soil, cluster around him the conservative influences of home, and you bind him in an allegiance stronger than a thousand oaths. Sprung from the earth and destined to return to it, every man wishes to acquire an interest in it, some little spot that he may call his own. It is a deep, absorbing feeling that nature has planted in us. The sailor on the "vasty deep;" the lone trapper in the gorges of the Rocky mountains; the hunter as he threads his chamois track; the soldier perishing for fame ere he freezes into a corpse, dreams—all dream of home; and when every other feeling is subdued and withered, even in hearts that blench not at crime and blood, this survives and glows! It is an inextinguishable flame. And when one has been driven forth by tyranny, or gone out from his father's wasted roof, and in the wild forest gathered his household around some humble shed, can he see it wrested from him by the laws of his country, without cursing that country and those who govern it?—*Low. Statesman.*

From the Detroit Tribune.

Salt Business of the Country.

God, in his wisdom, seems to have placed before man, every requisite for his sustenance. Salt abounds in all countries. It is inexhaustible, and second in supply to air, and said to be as necessary.

Of Rock Salt, the most remarkable mass is a mountain in Spain, at Cardona. It is 663 feet high, and 1200 feet in breadth. It is an isolated mound, the whole country about it being slate and limestone. La Borde says: "Nothing can compare with the magnificence of the spectacle which the mountain of Cordova exhibits at sunrise. Besides the beautiful form that it presents it appears to rise above the river, like a mountain of precious gems, displaying the various colors, produced by the refraction of the solar rays, like a prism." The Rev. Dr. Townsend visited it fifty years ago, and says the inhabitants make all kinds of toys, snuff-boxes, vases and other ornaments and trinkets of it, as it is hard to melt. The mine belongs to the crown of Spain, and sentinels are placed about it to guard it. Dr. Franklin visited it in 1814. A large number of workmen were employed in cutting it into blocks, which were sold at about one penny of our currency, per pound. It is conveyed on the backs of mules over the mountains.

In Hungary and Poland there is an immense deposit of Rock Salt on both sides of the Carpathian mountains. It is said to extend from the Black Sea to the Alps. To this fountain belongs the famous salt mine of Weileczka, near the city of Cracow. It was first worked in 1237. Its length is 6,691 feet. In 1780 its depth below the surface was 743 feet. A late work says, it is now some 800 feet below the surface of the soil. It is got out in masses of several hundred pounds. Travelers speak of the wonderful curiosities of this mine. Several chapels are excavated in the salt, in which mass is said; one of these chapels is 80 feet long and 25 broad—the altar, the crucifix, the ornaments of the church and the statues of the several saints, are all carved out of solid salt. All the chambers are free from moisture. The excavations are supported by huge pillars of salt, left for that purpose. Barns for the horses are made by digging into the rock, and a few rods from it, springs of fresh water are to be found. This mine formerly belonged to the kings of Poland, as part of their revenue, which produced them annually about a half a million of dollars. In the division of Poland, by the royal robbers of Europe, this was allotted to Austria, and is now held by the Emperor. No less than 159 mines and salt springs have been found on both sides of the Carpathians.

Rock Salt is also found in Cheshire, England. Henry the Sixth imported a large number of salt workers from Holland, to crystallize salt from the Cheshire Springs. They were worked until 1760, when searching for coal, the miners came to a salt rock at the depth of 110 feet. It was afterwards found to extend over the whole neighborhood. Mines from 15 to 20 miles distant from the spot where it was first discovered are now worked. Mr. Simond, visited the mines at Nantwich in 1841. He says "at the depth of 330 feet from the surface, we

found ourselves in a sort of palace of salt. The ceiling about 20 feet high, supported by pillars 15 feet thick. The area of the excavation was equal to three acres. The salt is so hard as to require gun powder in its excavation."

The quantity taken from the mines is about 60,000 tons annually. Some 15,000 tons are yearly exported to Prussia—a country in the vicinity of the Polish mines.

Rock Salt is found in almost every quarter of the globe. In a district in Asiatic Turkey it is frequently employed in the construction of buildings. In the desert of Siberia, there is an immense plain of common salt. In Peru, Algiers, Chili, New Granada, Mexico and California, are several mines to be found.

In this country, we have but one rock of salt yet discovered. That is in Tennessee. It is 220 feet below the surface. It was bored into 160 feet in 1840, without being passed through.

One of the most remarkable salt springs out of this country, is in Worcestershire, England. The Romans made salt from it. Salt was part of the pay of the Roman soldiery. Sir Richard Lane in 1725, conceived a notion that by sinking pits below the gypsum, he could obtain stronger brine. After passing through 150 feet of gypsum, he came to a river of brine 22 inches deep, which flowed up in abundance.

In this country, the Springs of Onondaga, N. Y., and the salines of Kenawha, Virginia, produce the greatest quantities for market,

Considerable quantities are made in Ohio, Illinois, Arkansas and Missouri, while on the sea-board some half a million of bushels are annually manufactured in Massachusetts and Long Island. Michigan, has also commenced its manufacture at Grand River, to a limited extent. It is understood that more extensive preparations are being made to extend the business the coming season. The State of Michigan, has expended some money to test the Tippiwassee River.

Amount of Salt made in the United States.

In 1829, the amount manufactured in this country, was 4,440,929 bushels. The average price at the works was from 40 to 50 cents a bushel.

The amount made in 1839, according to the U. S. census, was as follows:

State.	Bushels.	State.	Bushels.
Maine,	50,000	S. Carolina,	2,250
N. Hampshire,	1,200	Kentucky,	219,695
Mass.,	376,596	Ohio,	297,350
Conn.,	1,500	Indiana,	6,400
N. York,	2,867,884	Illinois,	20,000
N. Jersey,	500	Missouri,	13,150
Penn.,	549,487	Arkansas,	3,700
Delaware,	1,160	Florida,	12,000
Maryland,	1,200	Virginia,	1,745,618
N. Carolina,	1,493		
		Total,	6,175,174

The change from a fluid to a solid state is produced in three ways—by boiling, evaporation by artificial heat, and by solar evaporation.

The relative strength of the brine in the various states, at the latest dates, is as follows. It requiring for one bushel of salt—

At Nantucket, gallons	350
Boon's Lick, Mo.,	450
Conemaugh, Penn.,	300
Shawneetown, Ill.,	280
Jackson, Ohio,	213
Lockhart, Miss.,	180
St. Catharines, N. C.,	120
Michigan State Works, Grand River, 230 feet boring,	82½
Michigan Well at Tittabawassa, boring 139 feet,	221½
Lyon's,	80
Grand River, Lyon's,	80
Zanesville, Ohio,	95
Grand River, Arkansas,	80
Illinois River,	80
Muskegon, Ohio,	50
Kenawha, Va.,	70
Onondaga, N. Y.,	35

Improvements are said to have been made by extending the borings at most of the above places within a year or two. Shawneetown, Illinois, the past season, has made a bushel from 100 gallons—being a gain of 150 per cent.

The Onondaga works, are the most extensive.—Those of Virginia next. The quantity made at these works since the census of 1840, is thus:

New York Works.		
1840	2,262,305	Bushels,
1841	3,340,769	"
1842	2,291,103	"
1843	3,127,500	"
1844	4,003,553	"
1845	3,719,412	"
1846	3,804,776	"
1847	3,512,413	"
1848	4,188,109	"

Kenawha Works, Virginia.		
1845	3,600,000	Bushels.
1846	3,100,112	"
1847	2,676,309	"
1848	3,112,131	"

The cost of making salt in Virginia, is not one half that of Onondaga, although the brine with the latter is a hundred per cent stronger. At Syracuse, wood is \$3.50 the cord—about one thousand cords are used daily.

In sinking a shaft at the Virginia works to 1800 feet, a gas vent was opened, which rushed up with such force as to blow the drill polls hundreds of feet above the top of the well. This gas is used as fuel. It is taken in flues beneath the boilers, which are one hundred feet long, eight wide, and five deep, and are filled with an intense flame. Where gas is not used, bituminous coal is consumed, which costs but 2½ cents a bushel, as it is mined near the works, and a bushel of coal produces a bushel of salt.

The whole Mississippi and Ohio Rivers are supplied from these salines. Large quantities go to Cincinnati. Unless coal or some cheaper fuel is introduced at the Onondaga works, as the forest is fast giving away to the demand, the Virginia article, as water communication becomes cheap, will soon compete with the New York salt in Michigan, Illinois, and Wisconsin. This will depend considerably on the strength of the brine of the Michigan Springs that may be found on deeper boring, and the cheapness of its manufacture.

The quantity now made in this country is not far from

ten million bushels annually. The quantity imported, averages a little over six million bushels yearly. In 1846, the imports amounted to 5,423,317 bushels from the following countries.

Where From.	Bushels.
Danish West Indies,	18,318
Dutch, W. I.,	403,369
England,	3,762,070
Ireland,	206,200
British W. I.,	1,383,304
Mauritius,	103,219
French W. I.,	25,403
Spain on Atlantic,	356,012
Mediterranean,	32,792
Portugal,	120,607
Cape de Verds,	2,566
Turkey,	1,977
Hayti,	38
Argentine,	688
Africa,	4,278
Total,	6,423,317

The average quantity of consumption, therefore, is not far from fifty pounds per inhabitant. Allowing the population of Michigan, at three hundred and fifty thousand—her annual consumption may be estimated at not far from sixty thousand barrels.

The navigation of the St. Lawrence now being open to our shipping, we may soon look for exports from the Lakes to Europe direct. The return cargoes will be in part of rock salt, for ballast. The present duty of twenty per cent, is only about two cents on a bushel on its cost abroad. Such being the case, western farmers will soon be enabled to pack their beef, pork &c., whith an article much preferred at the East.

Another market to procure it will be found at Quebec, where some fourteen hundred lumber ships are annually freighted to England. Their return cargoes are generally ballast. The western market being opened salt will be used for this purpose, as it can be had a Marseilles for ten cents the bushel. Much ballast will be wanted through the season. Salt will be convenient at a low freight. If a bushel can be delivered at Montreal, with cost of the article at twelve cents, four cents in addition will freight it to Detroit, and two for duty. Then you have your salt delivered for eighteen cents a bushel, or at the rate of ninety cents the barrel. In that case the Virginia and New York salt cannot compete with it.

FLOWERS.—Flowers are indeed but emblems of His countless blessings—who openeth His hand and filleth all things living with plenteousness. Flowers are, in the language of the poets, “Nature’s jewels;” incitements to poetry and refined sentiment. They are emblems of the lovely, the innocent and the most dear. Gentle and delicious memories do they breathe of the absent and the dead, whilst they enhance the beauty, gayety and rapture of the living. Oh, man, cultivate a taste for flowers—those overflowings of His bounty who created the first Eden, and from whom we hope to receive the second.

GROUND COFFEE should be kept in a tight vessel; if this is not done, it soon loses its fine flavor—the aroma disappears with the volatile oil.

EDITOR'S TABLE.

Traveling Agents.

The following persons have been commissioned as Agents for the Valley Farmer:

G. H. WILSON, for Missouri, northern Illinois, and Iowa.

JOHN F. DUNNICA, for Missouri;

A. R. HAYNES, for Northern Illinois and Iowa;

J. W. BARLOW, of Burlington, will also act as General Agent for Iowa and vicinity.

CITY AGENT.—Mr. SIDNEY SMITH is authorized to receive subscriptions for the Valley Farmer and receipt for the same.

Some of our subscribers are still in arrears for the first volume. We hope they will not delay to remit the sums due. All arrearages should be sent to our address [E. Abbott,] and may be remitted by mail at our risk.

We would inform our friend of the *Peru Telegraph* that we very much regret that he has not received the Valley Farmer regularly during the past year, at the same time we do not think that we are altogether in fault. The number of his paper containing the complaint is the first number that has ever been received at the Farmer office; we happened, however, accidentally to see among the exchanges of the Union, a copy of the *Telegraph* containing a commendatory notice of the Farmer; and we directed the name to be placed on our exchange list. This order was not obeyed, and hence the paper was not sent. Our cousin had a right to be vexed, but he should have sent us his paper, and been a little more charitable towards the poor "foreigners." We thank him for his friendly notice, and hope we shall receive his interesting paper regularly hereafter.

Good FAMILY NEWSPAPERS.—We receive, among our exchanges many valuable and interesting political journals, which "act well their parts" in their respective spheres, but to name them all would be but a useless waste of time. Our object now is to speak of a number of excellent literary and miscellaneous papers which from time to time find their way to our table. Some of them are very regular in their arrival, others come "occasionally."

The *Chicago Dollar Newspaper*, is an elegantly printed paper, of a large size, containing much that is both useful and interesting, and is furnished at the very low price of one dollar per annum—six copies for five dollars, 13 for \$10, and twenty-seven for \$20. As an extra inducement to form clubs the proprietors propose to furnish the members of the largest club which may be organized the present year, the paper for next year gratis. J. R. BULL & CO., publishers, Chicago.

Moore's Rural New Yorker.—We received the first number of this paper, with a request to exchange—since then we have seen nothing of it. It is published weekly, in quarto form, on a large sized sheet, at two dollars per annum. It contains much scientific and

practical matter, relative to agriculture, horticulture, education, morals, and the arts. Mr. Moore, the editor, was for some time connected with the *Genesee Farmer*, and is well qualified for his task. Will the publisher be so kind as to send us the back numbers?

The *Family Visitor*, is the title of another new paper, of which we have received five or six numbers. It is published at Cleveland, Ohio, in quarto form, and appears very much in its style and character to resemble the *Rural New Yorker*. We hope the good people of the Buckeye State will not permit such an excellent paper to languish in their midst. It is edited by Professors Kirtland and St. John, and is very neatly printed, and illustrated with numerous engravings. Terms, two dollars per annum.

In this connexion we may also mention the *Boston Olive Branch*, that universal favorite with the factory girls of New England. This paper is too well known to need any praise from us. It is one of the best papers of its class in the United States.

AN IMPORTANT HINT.—A friend at our elbow suggests that common spirits of turpentine is highly noxious to all the insect tribe, and that consequently it will destroy the worm or bug which of late years has committed such extensive and fatal ravages in our wheat fields of other grain. He says, that with a watering pot, finely perforated a person of ordinary industry can easily sprinkle ten acres in a day. The quantity of spirit required for this extent of surface, does not exceed two or three gallons. This is a very simple remedy, and, if efficacious, will undoubtedly be productive of great practical benefit.—*Olive Branch*.

Contents of this Number.

Spring Wheat,	page 41
Wire Fences,	42
Osage Orange Hedges,	43
Culture of Madder in Ohio; Great Cow case; Plank'em,	44
Proceedings of the North American Pomological Convention,	45
Horses vs. Mules,	46
Cultivation of Hemp; Army Worm; Vegetable Fecundity;	47
Strawberries, Animal and Vegetable Manures;	48
Bartlett's Double Plow,	49
Prize Essay on the Culture and Management of Tobacco,	50
Cleon and I; Distemper in Dogs; Do not mix your Potatoes,	53
Durability of Fences,	54
Prospects for Wool Growers,	55
Hydraulics for the Farm,	56
Home Department Agricultural Report; Beet Root Sugar,	57
Chinese Farm House; Chess,	58
Cultivation of Tea in the United States; Pear Tree and Fire Blight,	59
Farming in Missouri; Kings of the Soil; Proving an Alibi,	60
The Usury Laws,	61
For YOUTH—Saw Up and Saw Down,	62
Drowne's Wooden Image,	64
A Garden; Cultivation of the Cauliflower; Care and management of Ornamental Flowering Plants for February,	66
Machine for Dressing Stone; Next Patent Office Report,	67
HORTICULTURE—St. Louis Horticultural Society; Warts on Plum and Cherry Trees; The Public Lands,	68
Salt Business of the country,	70
EDITOR'S TABLE—Important Hints,	72